TM 11-5820-747-15

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

OPERATOR, ORGANIZATIONAL, DS, GS
AND DEPOT MAINTENANCE MANUAL
INCLUDING REPAIR PARTS AND
SPECIAL TOOL LISTS

RECEIVER-TRANSMITTER, ORDERWIRE OA-7006/MRC-85(V)2 (GRAYBAR TYPE GB320)

HEADQUARTERS, DEPARTMENT OF THE ARMY

MARCH 1969

WARNING

DANGEROUS VOLTAGES EXIST IN THIS EQUIPMENT

Be careful when working on the power supplies and their circuits, or on the 115-volt ac line connections.

DON'T TAKE CHANCES!

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HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, D. C., *21 December 1973*

Operator's, Organizational, Direct Support, General Support, and Depot Maintenance Manual Including Repair Parts and Special Tools List RECEIVER-TRANSMITTER, ORDERWIRE OA-7006/MRC-85(V)2 (GRAYBAR TYPE GB320)

TM 11-5820-747-15, 24 March 1969, is changed as follows:

1. A vertical bar appears opposite changed material.
2. Remove and insert pages as indicated in the page list below:

Remove	*Insert*
i, ii, ii, 1, iii, and iv.	i through iii
1-0.1 and 1-0.2	1-0.1 (1-0.2 blank)
1-1 and 1-2	1-1 and 1-2
A-1 through A-3	None

3. File this change sheet in the front of the manual for reference purposes.

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NG: None
USAR: None
For explanation of abbreviations used, see AR 310-50.

Technical Manual
No. 11-5850-747-15

HEADQUARTERS
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Washington, D.C., *24 March 1969*

OPERATOR'S ORGANIZATIONAL, DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE MANUAL INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS

RECEIVER-TRANSMITTER, ORDERWIRE OA-7006/MRC-85(V)2 (GRAYBAR TYPE GB320)

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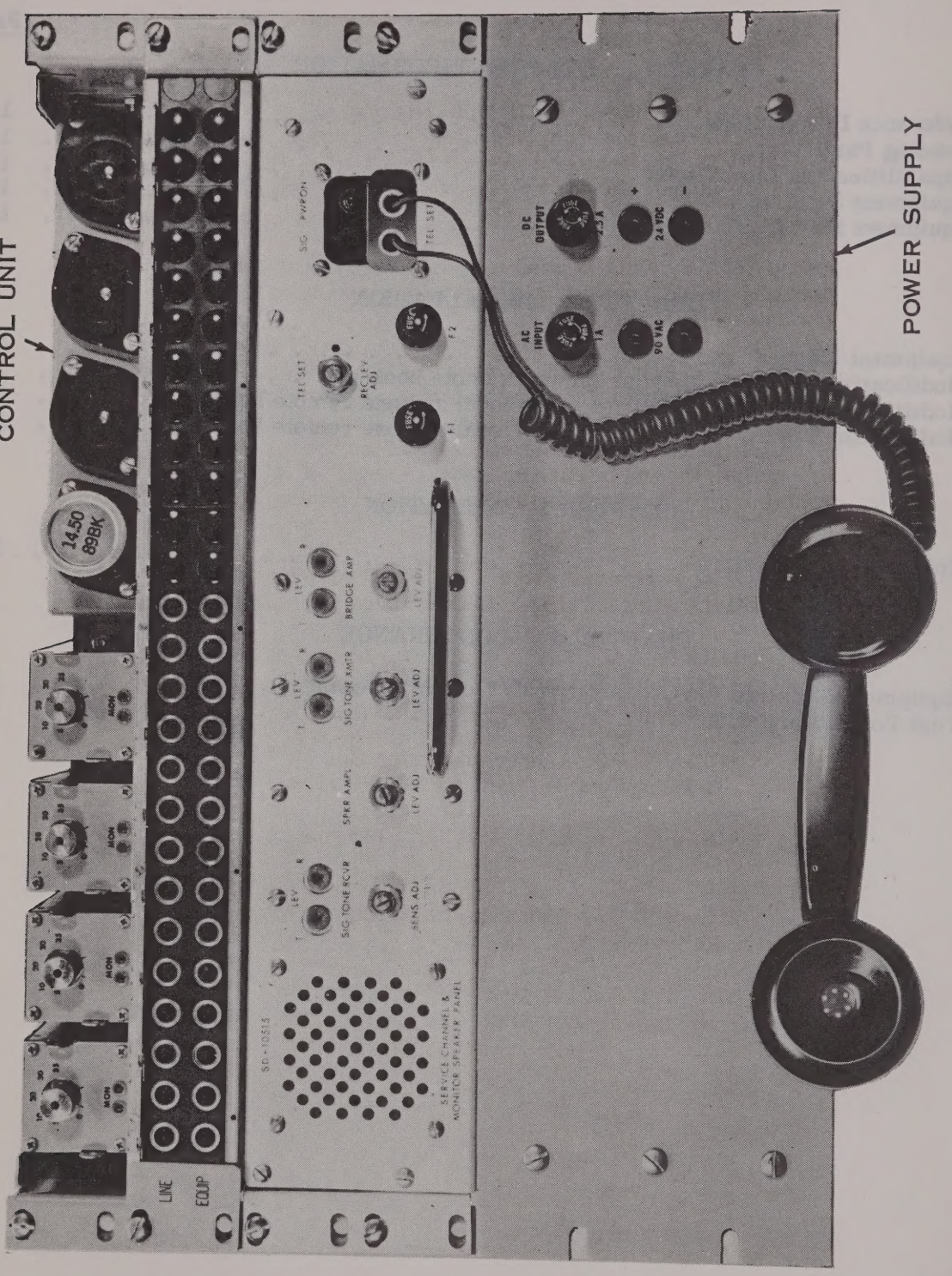

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Figure 1-1. Order Wire Telephone Set

CHAPTER 1
GENERAL INFORMATION

1-A.1. Scope

a. This manual includes installation and operation instructions for Receiver-Transmitter, Orderwire OA-7006/MRC-85(V)2 (Graybar Electric Company Type GB320). It covers operator's, organizational, direct support (DS), general Support (GS), and depot maintenance.

b. The maintenance allocation chart (MAC) appears in appendix B; the repair parts for organizational maintenance and the repair parts for direct support, general support, and depot appear in appendix C.

NOTE

Appendixes B and C are current as of 15 May 1968.

1-A.2. Indexes of Publications

a. DA Pam 310-4. Refer to the latest issue of DA Pam 310-4 to determine whether there are new editions, changes, or additional publications pertaining to the equipment.

b. DA Pam 310-7. Refer to DA Pam 310-7 to determine whether there are modification work orders (MWO's) pertaining to the equipment.

1-A.3. Forms and Records

a. Reports of Maintenance and Unsatisfactory Equipment. Maintenance forms, records, and reports which are to be used by maintenance personnel at all maintenance levels are listed in and prescribed by TM 38-750.

b. Report of Packaging and Handling Deficiencies. Fill out and forward DD Form 6 (Report of Packaging and Handling Deficiencies) as prescribed in AR 700-58 (Army)/NAVSUP PUB 378 (Navy)/AFR 71-4 (Air Force)/and MCO P4030.29 (Marine Corps).

c. Discrepancy in Shipment Report (DISREP) (SF 361). Fill out and forward Discrepancy in Shipment Report (DISREP) (SF 361) as prescribed in AR 55-38 (Army)/NAVSUP PUB 459 (Navy)/AFM 75-34 (Air Force)/and MCO P4610.19 (Marine Corps).

1-A.4. Reporting of Publication Improvements

The reporting of errors, omissions, and recommendations for improving this publication by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to Publications) and forwarded direct to Commander, US Army Electronics Command, ATTN: AMSEL-MA-C Fort Monmouth, NJ 07703.

1-1. General

1-2. The order wire telephone set provides party-line signaling and voice communications between stations of a uhf forward propagation tropospheric scatter communications system (see fig. 1-1). All connected stations monitor all conversations and receive all calling signals. A predetermined signaling code is used to alert an individual station.

1-3. Intersite order wire communications are by way of the radio link between sites, but in most applications are bypassed around the multiplexing equipment that is a part of each site. The order wire communications are normally used in assisting the individual station operators in maintaining the quality of the normal traffic-carrying multiplexed radio signal.

1-4. The order wire telephone set is discussed throughout this manual as it is used with Radio Set AN/MRC-85(V)2. This is a typical application only.

1-5. Description and Purpose

1-5.1 Items comprising an operable equipment are as follows:

FSN	*Qty*	*Nomenclature, part No., and mfr code*	*Fig. No.*
		Order Wire Telephone Set: OA-7006/MRC-85(V)2 consisting of:	6-7
		NOTE The part number is followed by the applicable 5-digit Federal supply code for manufacturers (FSCM) identified in SB 708-42 and used to identify manufacturer, distributor, or Government agency, etc.	
5820-713-0911	4	Amplifier, Audio Frequency AM-4168/MRC-85(V)2: GB624, 99141.	6-8
	1	Attenuator, Fixed CN-1009/MRC-85(V)2: 89BR-17DB, 64959	6-8
	1	Control, Telephone Set C-6370/MRC-85(V)2: GB320-1, 00645	6-7
5965-519-6966	1	Handset H-242/MRC-85(V)2: G1AR-3, 64959	6-7
	1	Panel, Service Channel and Monitor Speaker: 10515, 12131	6-7
	1	Power Supply, PEC2744: 6066477, 04650	6-7

1-6. The order wire telephone set is located in the VFTG auxiliary group cabinet in the operations van of Radio Set AN/MRC-85(V)2 (see fig. 1-2).

1-7. The order wire telephone set consists of three major rack mounted units: The control unit, the service channel and monitor speaker panel, and a power supply. A telephone handset is also supplied as part of the equipment.

1-8. Control Unit

1-9. The control unit is comprised of 28 jack terminations for test, adjustment, and patching of the order wire circuits, four plug-in voice frequency line amplifiers which amplify outgoing order wire signals, and a plug-in attenuator which attenuates the order wire signal to the value required by the exciter in the transmitting system.

1-10. Service Channel and Monitor Speaker Panel

1-11. The service channel and monitor speaker panel contains a 4-way, 4-wire bridge used to permit party-line circuit operation; a bridge amplifier to compensate for losses in the 4-way, 4-wire bridge; a variable volume speaker amplifier and speaker; a signal tone receiver and buzzer for receiving remotely keyed calling signals; and a signal tone transmitter with keying facility for sending calling signals.

1-12. Power Supply

1-13. The power supply consists of a 24-volt dc supply, which provides the operating voltages for the control unit and the service channel and monitor speaker panel, and a 90-volt, 20-cycle supply for two-wire extension ringing (if used).

1-14. Handset

1-15. The order wire telephone set is provided with a handset containing a receiver and a transmitter.

1-16. Typical Order Wire Telephone System

1-17. Figure 1-3 shows a block diagram of a typical order wire telephone system.

1-18. One order wire telephone set is contained in each of the operations vans of the 10 AN/MRC-85(V)2 radio sets used in the typical system. Each order wire telephone set receives, sends and relays communications via radio linkage or land line. A signal originated by any van can be monitored or answered by any other van. For example, if the operator in van No. 4 at site F is in communications with the operator in van No. 7 at site A, his voice signal is

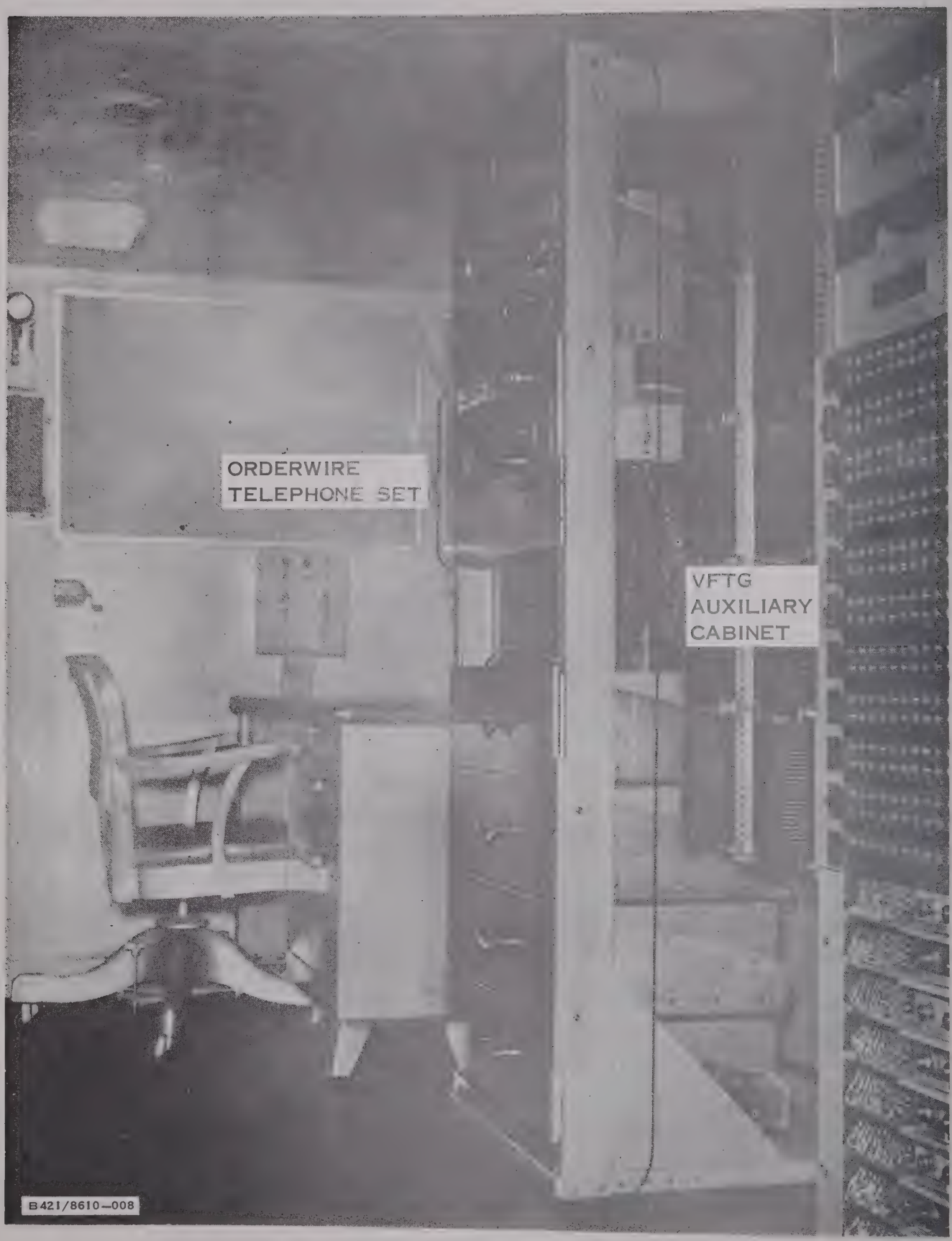

Figure 1-2. Order Wire Telephone Set, Location in Operations Van, AN/MRC-85(V)2.

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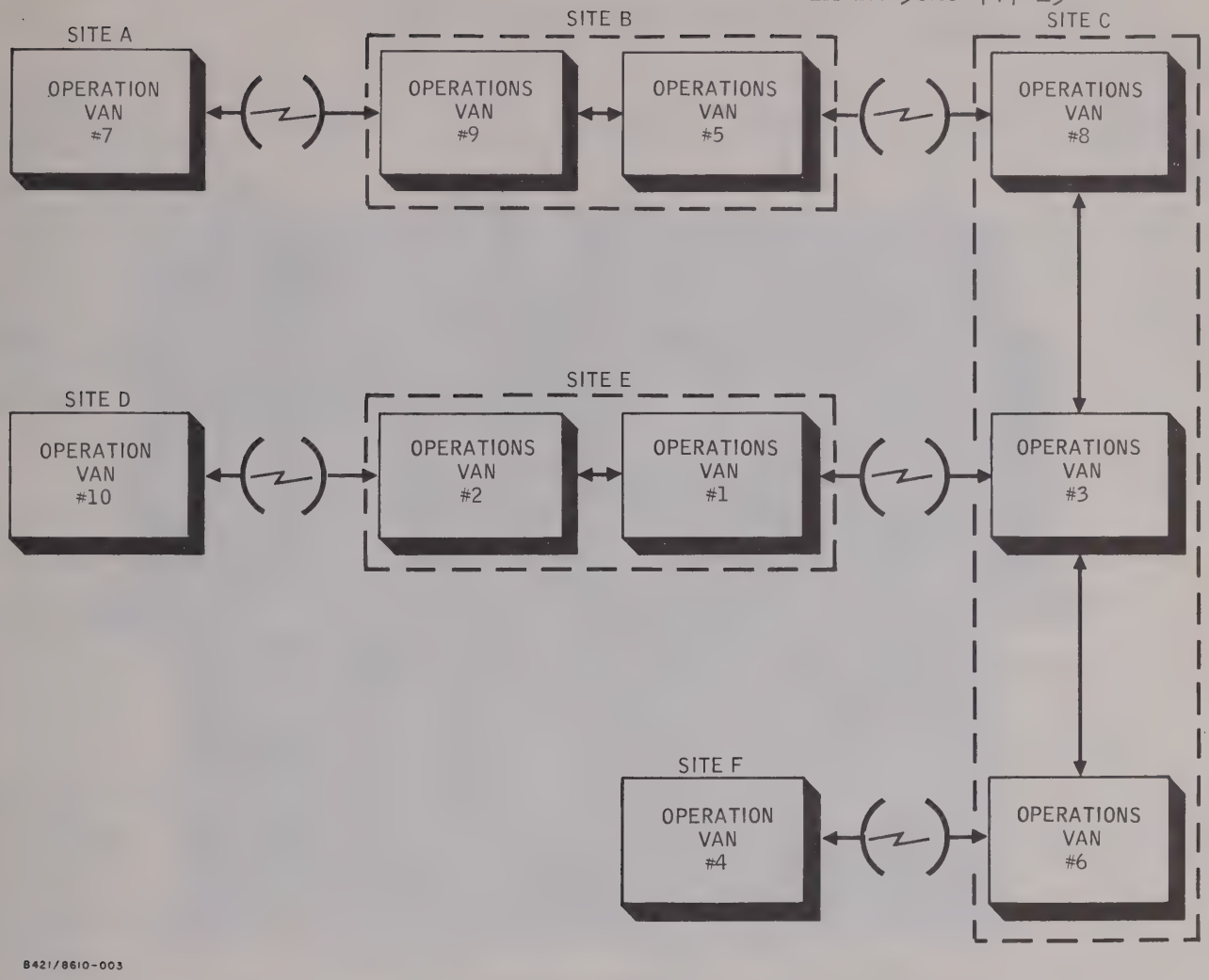


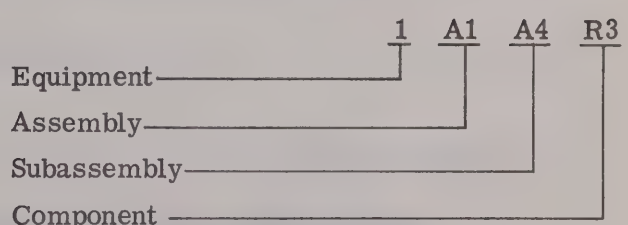
Figure 1-3. Order Wire Telephone System, Block Diagram

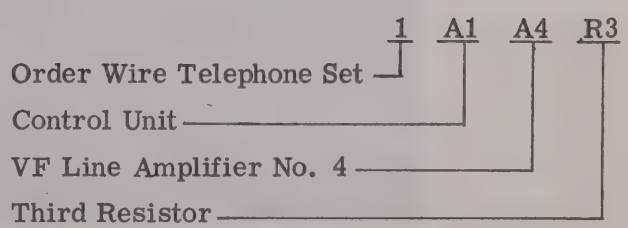
carried via the radio link to van No. 6 at site C. Van No. 6 monitors the conversation and relays the signal to van No. 3. Van No. 3 monitors the conversation and relays the signal to van No. 8, and via the radio link to van No. 1 at site E. Van No. 8 monitors and relays the signal via the radio link to van No. 5 at site B which in turn monitors and relays the signal to van No. 9. Van No. 9 monitors and relays the signal via the radio link to van No. 7 at site A. Van No. 1 monitors the conversation from van No. 3 and relays it to van No. 2, which in turn monitors and relays the signal by radio link to van No. 10 at site D.

1-19. REFERENCE DESIGNATIONS.

1-20. The reference designations (MIL-STD-16C) used for the major assemblies and subassemblies of the order wire telephone set are listed in table 1-1 and illustrated in figure 1-4.

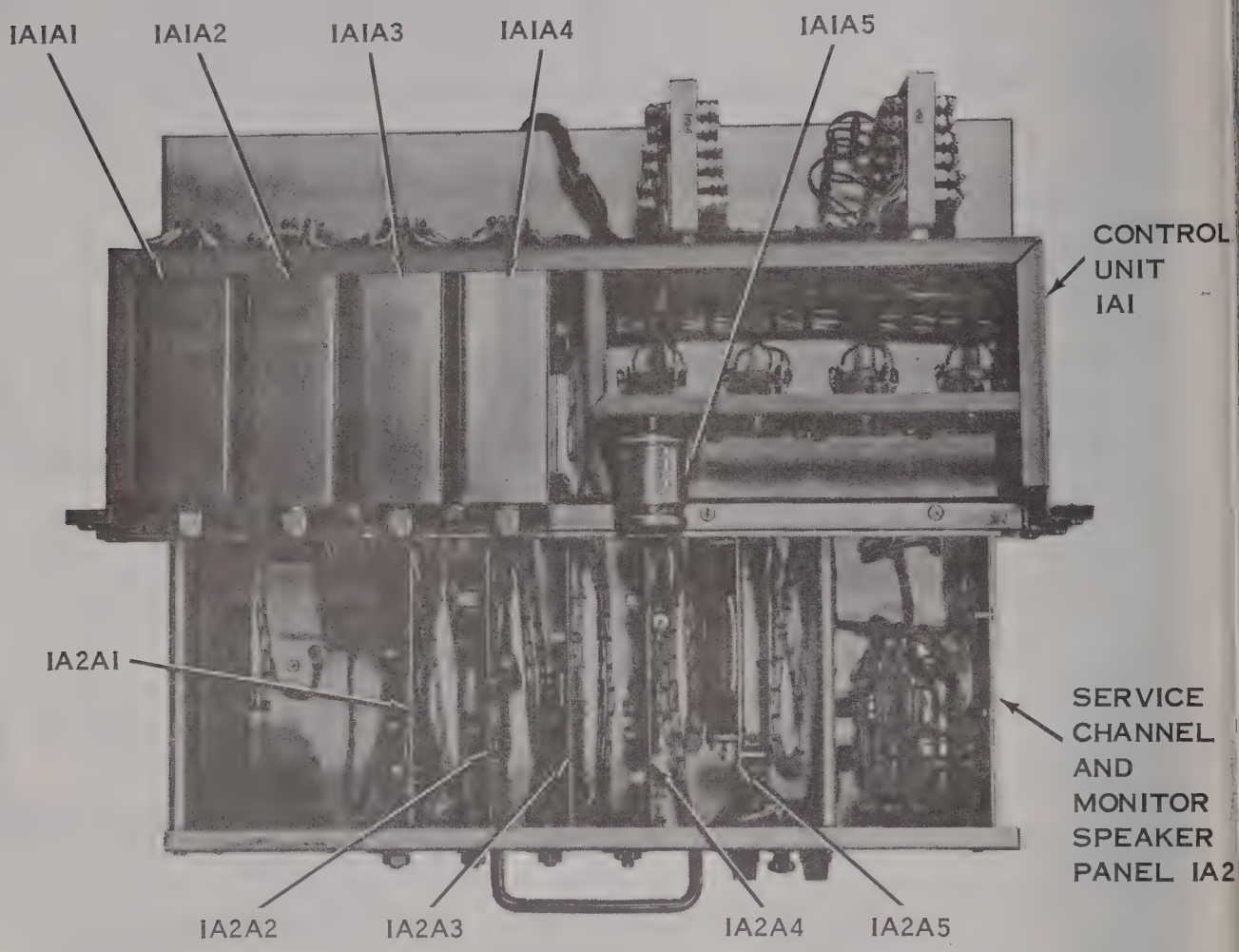
1-21. The following examples illustrate the use of the reference designations as an identification system.





1-22. INFORMATION AND REFERENCE TABLES.

1-23. Tables 1-2 through 1-5 contains information to help you become familiar with the features and characteristics of the equipment.



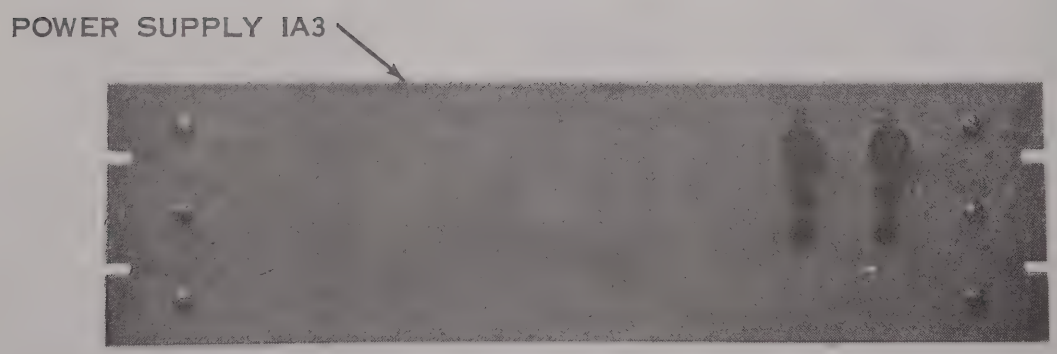


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Figure 1-4. Order Wire Telephone Set, Reference Designations

Table 1-1. Reference Designations

Unit	Designation
Control Unit	1A1
Vf Line Amplifier #1	1A1A1
Vf Line Amplifier #2	1A1A2
Vf Line Amplifier #3	1A1A3
Vf Line Amplifier #4	1A1A4
Resistor Assembly	1A1A5
Service Channel and Monitor Speaker Panel	1A2
Signal Tone Receiver Circuit Board	1A2A1
Speaker Amplifier Circuit Board	1A2A2
Signal Tone Transmitter Circuit Board	1A2A3
Bridge Amplifier Circuit Board	1A2A4
4-way, 4-wire Bridge Circuit Board	1A2A5
Power Supply	1A3

Table 1-2. Leading Particulars

Primary AC Power:	
Input voltage	115 ±11.5 volts ac
Frequency	60 ±0.6 cycles
Configuration	Single phase
Transportability:	
Air transportation	Small transport
Ground transportation	Small pickup truck or equivalent
Physical Characteristics:	
Control Unit:	
Weight	6 pounds
Dimensions	3-15/32 in. high, 19 in. wide, 5-1/4 in. deep
Service Channel and Monitor Speaker Panel:	
Weight	12 pounds
Dimensions	3-1/2 in. high, 19 in. wide, 10-1/2 in. deep
Power Supply:	
Weight	26 pounds
Dimensions	3 in. high, 19 in. wide, 14 in. deep
Handset:	
Weight	2 pounds
Dimensions	2-1/2 in. high, 2-1/2 in. wide, 8 in. long
Mechanical Storage: Assembled	Upright position

Table 1-3. Capabilities and Limitations

Control Unit:	
Jack Terminations: Level	0 dbm
Vf Line Amplifier:	
Gain, adjustable	0 to 38 db
Output, maximum	+18 dbm
Frequency range, 1 kc reference	200 cps to 10 kc (+0.2-1 db)
Ambient operating temperature	-4° to +140°F
Harmonic distortion, total, maximum	1% at +10 dbm, 300 cps to 4 kc
Input impedance	600Ω
Output impedance	600Ω
Attenuator Pad: Loss	17 db
Service Channel and Monitor Speaker Panel:	
Input impedance	600Ω
Output impedance	600Ω
Power Supply:	
Output voltage, dc	24.6 ±2.46 volts
Output voltage, ac	90 ±9 volts
Frequency	20 ±2 cycles
Output current, maximum	2 amperes
Normal current drain, maximum	490 milliamperes
Ambient operating temperature	50° to +122°F

Table 1-4. Equipment Supplied

Official Nomenclature	Manufacturer	Part No.	Common Name	Qty	Description
Control, Telephone Set C-6370/MRC-85(V)2	Graybar Electric Co.	GB320-1	Control Unit	1	Contains jack terminations, vf line amplifiers and an attenuator pad
Amplifier, Audio Frequency AM-4168/MRC-85(V)2	Lynch Communications	GB624	Vf Line Amplifier	4	Amplifies incoming or outgoing signals
Attenuator, Fixed CN-1009/MRC-85(V)2	Western Electric Co.	89BR	Attenuator Pad	1	Attenuates signal to associated exciter
Telephone Set TA-594/MRC-85(V)2	Farinon Electric Co.	10515	Service Channel and Monitor Speaker Panel	1	Provides a party-line transmission facility. Sends and receives calling signals
Power Supply PP-4168/MRC-85(V)2	Power Equipment Co.	PCE2744	Power Supply	1	Provides dc power for above equipment
Handset H-242/MRC-85(V)2	Western Electric Co.	G1AR3	Handset	1	Contains telephone transmitter and receiver

Table 1-5. Equipment Required but Not Supplied

Federal Stock No.	Description	Quantity
5120-234-8910	Screwdriver 5/16 in. width, 6 in. long blade	1
5120-180-3490	Screwdriver 1/4 in. width, 3/4 in. long blade	1
5120-224-2599	Wrench, socket, hex shape, 3/16 in.	1
5120-287-4161	Wrench, socket, hex shape, 1/4 in.	1
5120-224-2596	Wrench, socket, hex shape, 5/15 in.	1
5120-222-1498	Wrench, socket, hex shape, 3/8 in.	1
5120-247-5177	Pliers, long roundnose, 6 in. long	1
5120-239-8253	Pliers, diagonal cutting, 6 in. long	1
3439-294-676	Soldering gun, electric, 120 vac, 60 cps, 100 and 150 watts	1
5120-187-7124	Wrench, open end, 1/2 in. and 9/16 in.	1
5120-369-8864	Contact burnisher	1
6625-724-8582	Multimeter AN/PSM-6 ( )	1
6625-643-1670	Vacuum tube voltmeter ME-30A/U	1
	Oscilloscope (Tektronix 503)	1
6625-567-5837	Bridging network (Hewlett-Packard AC60A)	1
6625-539-8584	Test oscillator (Hewlett-Packard 650A)	1
5995-577-8130	Test cord (Lenkurt 613A)	1
	Terminating plug (Lenkurt 670A)	1
5995-725-5846	Test cord (Lenkurt 664A)	2

CHAPTER 2
INSTALLATION

2-1. INTRODUCTION. This chapter furnishes all of the information you will need to install the order wire telephone set. Section I contains data you will need in installation planning. Section II lists the equipment supplied and provides material handling data, cable requirements, and the information you will need before unpacking the order wire telephone set. Step-by-step installation procedures are given in Section III. Information you will need regarding reshipment is presented in Section IV.

SECTION I
INSTALLATION PLANNING

2-2. EQUIPMENT LOCATION.

2-3. The order wire telephone set is mounted in a standard 19-inch relay rack and requires 11-3/4 inches of panel space. The order wire telephone set should be mounted at a height convenient for operation. The location of this equipment relative to other equipment is not critical. Refer to the detailed site plans of your facility.

2-4. FIELD WIRING REQUIREMENT.

2-5. Due to the various possible configurations of the order wire telephone set, the control unit must be wired for your particular application. This wiring must be performed prior to installation in the rack. Detailed instructions for the field wiring is given in Section III of this chapter.

2-6. AC POWER REQUIREMENT.

2-7. Primary power required for the order wire telephone set is 115 vac ±10%, 60 cps ±1%, 2 amps minimum.

SECTION II
LOGISTICS

2-8. RECEIVING DATA.

2-9. Table 2-1 lists all of the supplied equipment. The table includes the following shipping data: contents of each crate; uncrated and estimated crated dimensions; estimated volume; and estimated gross weight of each component. Preservation and packing of each component is in accordance with MIL-F-1160.

NOTE

The order wire telephone set is usually shipped as a part of the AN/MRC-85(V)2 radio set. In this event table 2-1 is not applicable.

Table 2-1. Equipment Shipped

Crate	Items Shipped	Uncrated Dimensions (in.)	Dimensions (in.)	Crated Weight (lbs)	Volume approx. (cu ft)
1	Control Unit	3-15/32 x 19 x 5-1/4	9 x 21 x 12-1/2	29	1.37
	Service Channel and Monitor Speaker Panel ...	3-1/2 x 19 x 10-1/2			
2	Power Supply	3 x 19 x 14	5 x 21 x 16	42	0.97
3	Handset	2-1/2 x 2-1/2 x 8	4-1/2 x 4-1/2 x 10	3	0.12

2-10. TRANSPORTABILITY AND MATERIAL HANDLING.

2-11. The order wire telephone set may be transported to any given site by air, rail or truck. The crated equipment may be ground transported by light "pick-up" truck.

2-12. When moving the crated components within the station, a conventional mover's dolly should be used. If a dolly is not on hand, the equipment should not be lifted or moved unless two men are available for this purpose.

CAUTION

Extreme care should be exercised when moving the equipment to avoid severe shock to the equipment.

2-13. CABLE REQUIREMENTS.

2-14. All necessary interconnecting cables and the ac power cord are supplied with and attached to the order wire telephone set. All input and output cables are supplied with the facility into which the order wire telephone set is installed.

NOTE

The order wire telephone set is usually factory installed in the operations van of the AN/MRC-85(V)2 radio set. In this event, perform the installation procedures called out in paragraphs 2-24 through 2-27, and paragraph 2-34 only.

2-15. RECEIPT AND UNPACKING.

2-16. The individual components of the order wire telephone set are completely assembled before they are crated. In addition, prior to crating, the control unit is attached to the service channel and monitor speaker panel both mechanically and electrically.

2-17. In order to expedite installation, the crates should be placed as close as possible to the rack. When uncrating the equipment, extreme care should be taken since the crating and insulation will be needed when reshipment of the equipment is necessary.

2-18. Each piece of equipment must be inspected for physical damage when it is unpacked. If the equipment is damaged in any way, notify the appropriate authority.

SECTION III
INSTALLATION PROCEDURES

2-19. TOOLS.

2-20. Installation procedures are performed using the tools listed in table 1-5.

2-21. ORDER WIRE TELEPHONE SET INSTALLATION WIRING.

2-22. GENERAL.

2-23. All installation wiring must be completed prior to securing the order wire telephone set in the rack. Refer to figure 2-1 for the location of the three terminal boards to be wired. The control unit has been factory attached to the service channel and monitor speaker panel both mechanically and electrically prior to shipment.

2-24. CONTROL UNIT WIRING.

2-25. Each order wire telephone set requires control unit wiring to adapt the equipment for its particular application.

NOTE

If the control unit and monitor speaker panel (attached together) have been previously installed, remove the two attached assemblies from the rack.

2-26. Figure 2-1 illustrates terminal strips 1A1TB1 and 1A1TB2. Install the wiring between and on these terminal strips in accordance with tables 2-2, 2-3 or 2-4, as required. (Refer to individual site plan.) Use No. 20 AWG white wire for these connections.

2-27. Table 2-2 calls out the wiring required for an order wire telephone set used in conjunction with one remote order wire telephone set. Table 2-3 calls out the wiring required for an order wire telephone set used in conjunction with one remote and one local order wire telephone set; that is, one located at a distant site and one located at the same site. Table 2-4 calls out the wiring required for an order wire telephone set used in conjunction with one remote and two local order wire telephone sets.

2-28. POWER SUPPLY WIRING.

2-29. A cable consisting of five wires is furnished with and connected to the control unit. Connect the cable to terminal board 1A3TB1 on the power supply as follows (fig. 2-1):

a. Connect the green wire to terminal 1.

b. Connect the green-white wire to terminal 2.

c. Connect the orange-white wire to terminal 3.

d. Connect the orange wire to terminal 4.

e. Connect the black wire to terminal 5.

2-30. EXTERNAL WIRING CONNECTIONS.

2-31. Connect the external wiring as follows:

a. Connect the coaxial connector to the transmitter exciter to PAD receptacle 1A1J39.

b. Connect the coaxial connector from the receiver to AMP receptacle 1A1J38.

c. Connect the receive leads from the first local order wire telephone set (if used) to terminal board 1A1TB2, row 8, terminals 3 and 4.

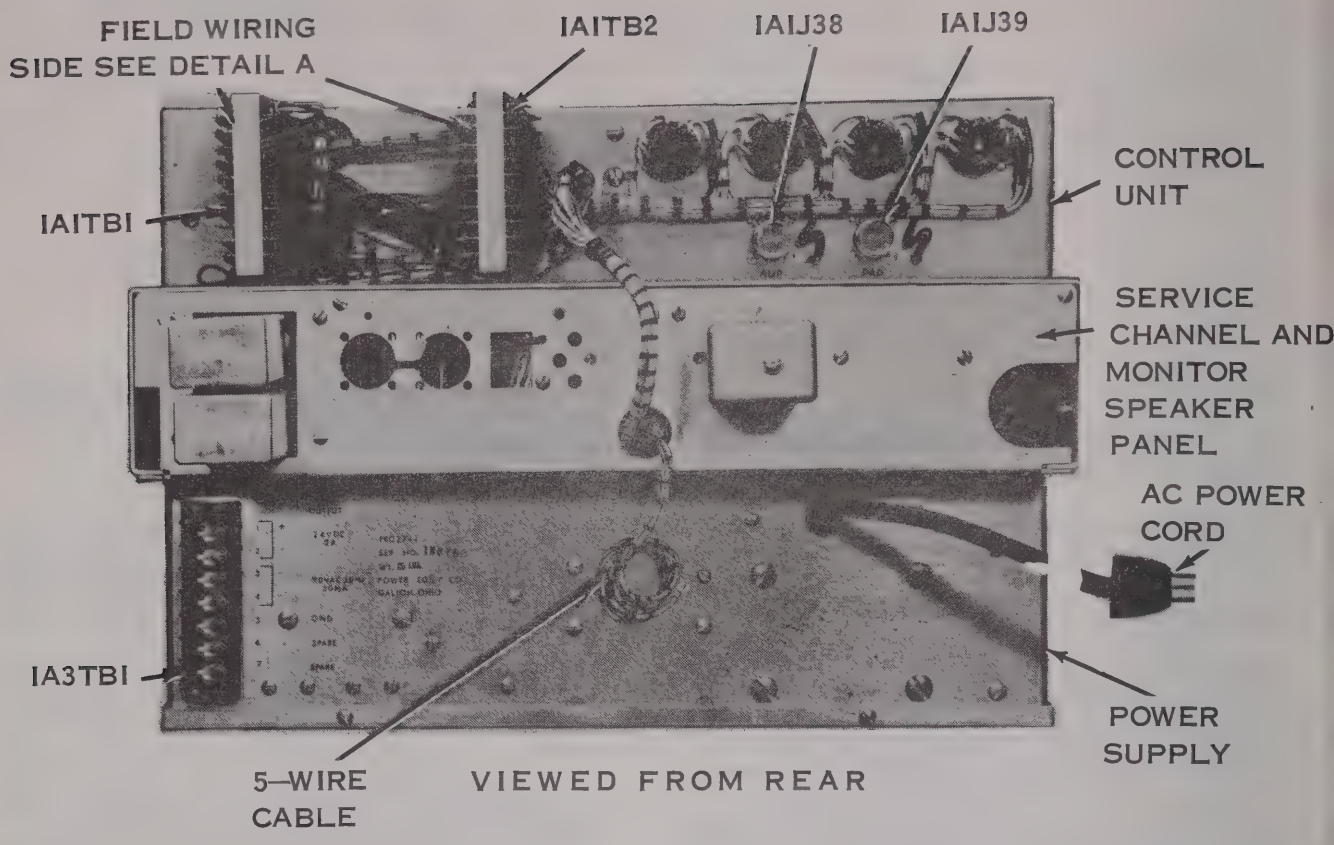
d. Connect the send leads to the first local order wire telephone set to terminal board 1A1TB2, row 7, terminals 3 and 4.

e. Connect the receive leads from the second local order wire telephone set (if used) to terminal board 1A1TB2, row 8, terminals 5 and 6.

f. Connect the send leads to the second local order wire telephone set to terminal board 1A1TB2, row 7, terminals 5 and 6.

g. Connect the ground lead from the rack to terminal board 1A1TB2, row 10, terminal 6.

h. Connect the ac power connector to the required primary power source.



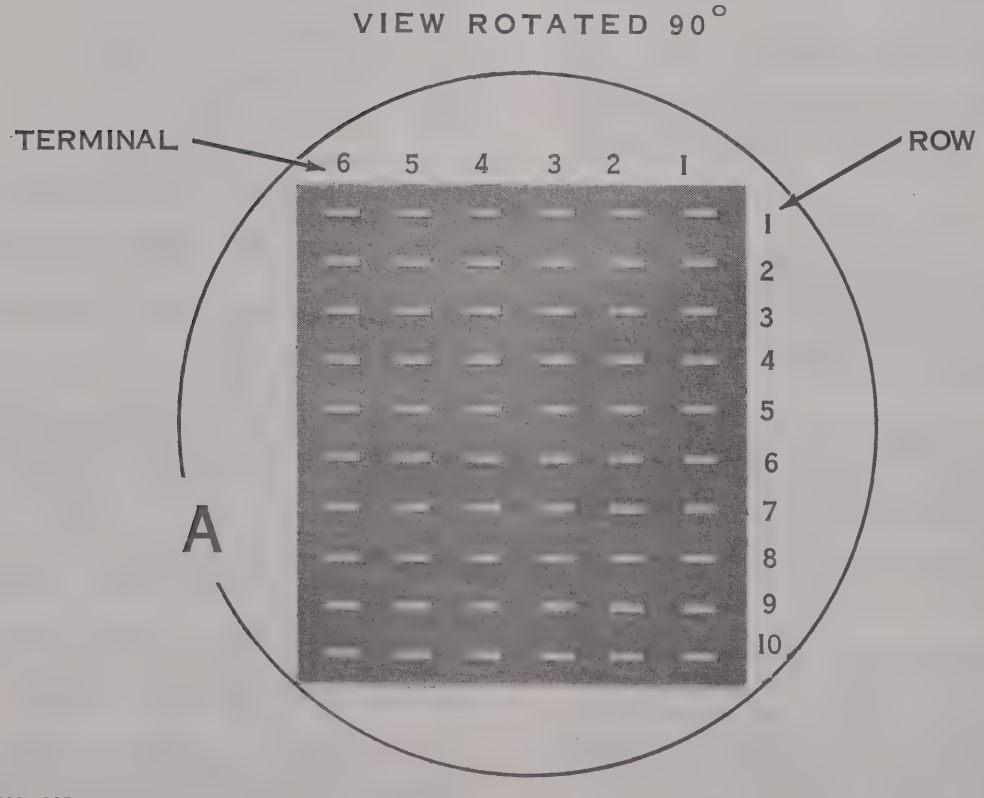


Figure 2-1. Order Wire Telephone Set Wiring

Table 2-2. Modification Wiring Table
(Use for one remote hook-up)

From—			To—		
1A1TB	Row	Term	1A1TB	Row	Term
1	1	1	2	4	3
1	1	2	2	4	4
1	2	1	2	2	1
1	2	2	2	2	2
1	3	1	2	1	3
1	3	2	2	1	4
1	4	1	1	5	1
1	4	2	1	5	2
1	5	3	2	1	5
1	5	4	2	1	6
1	5	5	1	7	1
1	5	6	1	7	2
1	6	1	1	7	3
1	6	2	1	7	4
1	6	3	1	7	5
1	6	4	1	7	6
1	6	5	1	8	1
1	6	6	1	8	2

Table 2-3. Modification Wiring Table
(Use for one local and one remote hook-up)

From—			To—		
1A1TB	Row	Term	1A1TB	Row	Term
1	1	1	2	4	3
1	1	2	2	4	4
1	1	3	2	7	3
1	1	4	2	7	4
1	2	1	2	2	1
1	2	2	2	2	2
1	2	3	2	2	5
1	2	4	2	2	6
1	3	1	2	1	3
1	3	2	2	1	4
1	3	3	2	8	3
1	3	4	2	8	4
1	4	1	1	5	1
1	4	2	1	5	2
1	4	3	1	5	5
1	4	4	1	5	6
1	5	3	2	1	5
1	5	4	2	1	6
1	6	1	2	2	3
1	6	2	2	2	4
1	6	3	1	7	1
1	6	4	1	7	2
1	6	5	1	7	3
1	6	6	1	7	4

Table 2-4. Modification Wiring Table
(Use for two local and one remote hook-up)

From—			To—		
1A1TB	Row	Term	1A1TB	Row	Term
1	1	1	2	4	4
1	1	2	2	4	3
1	1	3	2	7	3
1	1	4	2	7	4
1	1	5	2	7	5
1	1	6	2	7	6
1	2	1	2	2	1
1	2	2	2	2	2
1	2	3	2	2	5
1	2	4	2	2	6
1	2	5	2	3	3
1	2	6	2	3	4
1	3	1	2	1	3
1	3	2	2	1	4
1	3	3	2	8	3
1	3	4	2	8	4
1	3	5	2	8	5
1	3	6	2	8	6
1	4	1	1	5	1
1	4	2	1	5	2
1	4	3	1	5	5
1	4	4	1	5	6
1	4	5	1	6	3
1	4	6	1	6	4
1	5	3	2	1	6
1	5	4	2	1	5
1	6	1	2	2	3
1	6	2	2	2	4
1	6	5	2	3	1
1	6	6	2	3	2

2-32. ORDER WIRE TELEPHONE SET MECHANICAL INSTALLATION.

2-33. Install the order wire telephone set as follows:

a. Lift the control unit and the service channel and monitor speaker panel into place in the rack.

b. Secure the equipment to the relay rack with 10 standard relay rack mounting screws.

c. Lift the power supply into place in the rack.

d. Secure the power supply to the relay rack with four standard relay rack mounting screws.

2-34. ALIGNMENT AND ADJUSTMENT.

2-35. Perform alignment and adjustment procedures as described in Chapter 5 of this manual.

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SECTION IV
PREPARATION FOR RESHIPMENT

2-36. If the order wire telephone set is reshipped with the facility into which it has been installed, tighten all rack mounting screws securely.

2-37. If the order wire telephone set is reshipped separately, remove and repack in reverse order of the installation procedures given in paragraphs 2-28 through 2-33.

CHAPTER 3
OPERATION

3-1. INTRODUCTION. This chapter furnishes the instructions you will need to operate the order wire telephone set. It is assumed that the order wire telephone set has been previously operated and aligned, and that normal preventive maintenance has been performed. Section I lists and illustrates the controls and indicators necessary for operation. Section II describes the procedures for turn on, operation, and turn off of the order wire telephone set.

SECTION I
CONTROLS AND INDICATORS

3-2. IDENTIFICATION OF CONTROLS AND INDICATORS.

3-3. Figure 3-1 illustrates the controls and indicators used to operate the order wire telephone set. The controls used to maintain and align the order wire test set are illustrated in Chapter 5.

3-4. Table 3-1 lists and describes all of the controls and indicators used to operate and maintain the order wire telephone set. The test jacks are listed in Chapter 5.

3-5. INTERLOCK CIRCUITS.

3-6. The order wire telephone set contains no interlock circuits.

SECTION II
OPERATING INSTRUCTIONS

3-7. TURN ON PROCEDURE.

3-8. The order wire telephone set is turned on by connecting the power supply ac power plug to the power source. The PWR ON lamp should light, indicating that power is applied. The order wire telephone set should be on at all times during normal operation.

3-9. OPERATING PROCEDURE.

3-10. ORDER WIRE TRANSMISSION.

3-11. The following steps are necessary to call the personnel operating a particular order wire telephone set:

a. Transmit the proper coded signal for the order wire telephone set being called, by alternately depressing and releasing the SIG pushbutton (fig. 3-1).

b. Insert the handset plug into the TEL SET jacks and await the reply from the called party.

c. When a reply is heard in the handset receiver, speak in a normal tone into the handset transmitter.

d. When the conversation is completed remove the handset plug.

3-12. To simultaneously call the personel operating all order wire telephone sets insert the

Table 3-1. Controls and Indicators

Name	Reference Designation	Function
DB control	1A1A1R1	Varies gain of vf line amplifier #1
DB control	1A1A2R1	Varies gain of vf line amplifier #2
DB control	1A1A3R1	Varies gain of vf line amplifier #3
DB control	1A1A4R1	Varies gain of vf line amplifier #4
TEL SET jacks (fig. 3-1)	1A2J1 and 1A2J2	Provide telephone handset receptacles
SIG pushbutton switch (fig. 3-1)	1A2S1	Momentarily depressed to signal the other order wire telephone sets
PWR ON indicator lamp (fig. 3-1)	1A2DS1	Shows application of power
SIG TONE RCVR LEV ADJ	1A2A1R7	Varies sensitivity of the signal tone receiver circuit
SPKR AMPL LEV ADJ	1A2A5R5	Varies gain of the speaker amplifier circuit
SIG TONE XMTR LEV ADJ	1A2A3R10	Varies the output level of the signal tone transmitter circuit
BRIDGE AMPL LEV ADJ	1A2A5R8	Varies the gain of the bridge amplifier circuit
TEL SET REC LEV ADJ	1A2R12	Varies the volume of the received signal in either the handset receiver or the speaker
Variable resistor	1A3R8	Varies the output frequency of the 20-cycle signal generator circuit
Variable resistor	1A3R9	Varies the output amplitude of the 20-cycle signal generator circuit

handset plug into the TEL SET jacks and speak into the handset transmitter. Remove the handset plug when the conversation is completed.

Figure 3-1. Service Channel and Monitor Speaker Panel, Front Panel, Right Side

3-13. ORDER WIRE RECEPTION.

3-14. When you are alerted, either by voice paging or by coded signal, insert the handset plug into the TEL SET jacks and reply. Remove the handset plug when the conversation is completed.

NOTE

The monitor speaker is operational only when the TEL SET jacks are not in use.

3-15. TURN OFF PROCEDURE.

3-16. To turn off the order wire telephone set, remove the power supply ac power plug from the power source. The PWR ON lamp should go out.

3-17. EMERGENCY TURN OFF PROCEDURE.

3-18. In the event of a short circuit, creating the possibility of fire, all power may be quickly removed by removing fuse F1 from the power supply (fig. 3-1).

CHAPTER 4
PRINCIPLES OF OPERATION

4-1. INTRODUCTION. The information in this chapter explains the principles of operation of the order wire telephone set. The chapter is divided into three sections. Section I describes general system operation. Section II describes the operation of the electronic circuitry.

SECTION I
FUNCTIONAL SYSTEM OPERATION

4-2. GENERAL.

4-3. The order wire telephone set is capable of transmitting, receiving and relaying party line signaling and voice information between communications stations.

4-4. The basic units of the order wire telephone set are illustrated in the functional block diagram, figure 4-1.

4-5. CONTROL UNIT.

4-6. ORDER WIRE RECEPTION.

4-7. Incoming order wire signals (tone or voice) from a remote order wire telephone set arrive at a line amplifier in the control unit by way of the station receiving equipment. These order wire signals are amplified to the proper level for application to the 4-way, 4-wire bridge in the service channel and monitor speaker panel. Order wire signals (tone or voice) from local order wire telephone sets are passed straight through the control unit, since these signals were amplified to a suitable level at the local order wire telephone set. If one or more local order wire telephone sets are not used, the respective control unit input terminals are terminated by 600-ohm resistors. This termination prevents an unbalance in the 4-way, 4-wire bridge in the service channel and monitor speaker panel.

4-8. ORDER WIRE TRANSMISSION.

4-9. The remaining three vf line amplifiers in the control unit are used to amplify the outputs of the order wire telephone set. All unused output terminals are terminated in 600 ohms.

4-10. The output for transmission to a remote order wire telephone set is first amplified to a common level established for test and patching purposes. The signal is then attenuated to the proper level for transmission via the exciter.

4-11. SERVICE CHANNEL AND MONITOR SPEAKER PANEL.

4-12. ORDER WIRE RECEPTION.

4-13. The line amplified voice or 2600 cps tone signal (IN #1) passes through the 4-way, 4-wire bridge, where some attenuation occurs, and is applied to the bridge amplifier (OUT #4). The bridge amplifier raises the level of the signal, compensating for the bridge loss.

4-14. If the handset is plugged into the front panel jacks, the signal is applied to the handset receiver and the signal tone receiver. When the handset is not in use the signal is applied to the signal tone receiver, the speaker amplifier and the two-wire extension circuit (if your order wire telephone set contains one).

4-15. The signal tone receiver accepts only the 2600 cps tone signal and energizes the buzzer (and an external ringer if provided).

4-16. The speaker amplifier amplifies the voice signal sufficiently to drive the speaker whenever the handset is not in use.

4-17. The two-wire extension circuit provides order wire reception at another location (extension handset) whenever the local handset is not in use. This two-wire extension circuit is not supplied with all order wire telephone sets.

4-18. Order wire signals from local order wire telephone sets at the same site (IN #2, IN #3) are received in a similar manner. Incoming signals, in addition to being received by the individual order wire telephone set, are relayed to the other order wire telephone sets at the same site (OUT #2, OUT #3) through the circuitry of the 4-way, 4-wire bridge.

4-19. ORDER WIRE TRANSMISSION.

4-20. Order wire transmission originates from three sources; the signal tone transmitter, the handset transmitter and an extension handset via the two-wire extension circuit (if provided). The two-wire extension circuit is disabled when the local handset is in use.

4-21. The SIG pushbutton is provided to apply either a voice signal from the handset transmitter in its normal position, or the 2600 cps tone signal from the signal tone transmitter, when depressed, to the 4-way, 4-wire bridge (IN #4).

4-22. Outgoing signals are sent to a remote order wire telephone set (OUT #1) and to local order wire telephone sets at the same site (OUT #2 and OUT #3) through the 4-way, 4-wire bridge.

4-23. POWER SUPPLY.

4-24. 24-VDC POWER SUPPLY.

4-25. The 24-vdc power supply provides the necessary voltage for the operation of the order wire telephone set.

4-26. 20-CYCLE SIGNAL GENERATOR.

4-27. The 20-cycle signal is normally used in conjunction with the two-wire extension circuit (when the order wire telephone set is so equipped). It provides a 90-volt, 20-cycle ringing voltage. The 20-cycle signal generator supplies the ringing voltage to the signal tone receiver which in turn applies this ringing voltage to the extension ringer when a tone signal is received.

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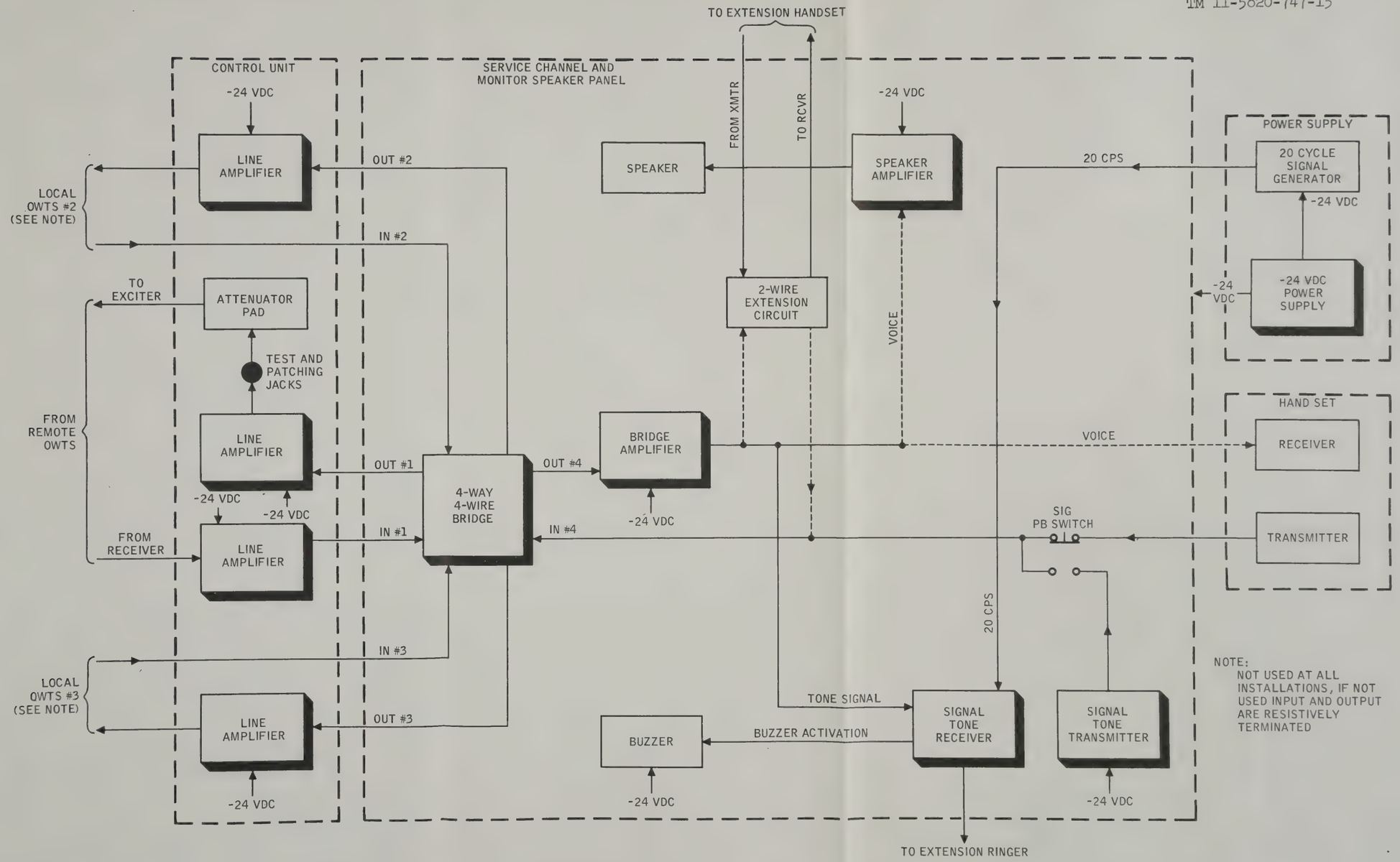

Figure 4-1. Order Wire Telephone Set, Functional Block Diagram

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SECTION II
FUNCTIONAL OPERATION OF ELECTRONIC CIRCUITS

4-28. CONTROL UNIT.

4-29. GENERAL.

4-30. The control unit consists of four plug-in vf line amplifiers, an attenuator pad, various test and patching jacks, four 600-ohm terminating resistors and two terminal blocks. The attenuator pad consists of a plug-in resistor assembly and a fixed attenuator socket.

4-31. These components are interconnected at the time of installation into one of three configurations. Configuration I (fig. 6-1) is used in conjunction with a remote order wire telephone set (distant site) and two local order wire telephone sets (same site). Configuration II (fig. 6-2) is used in conjunction with a remote and a local order wire telephone set. Configuration III (fig. 6-3) is used in conjunction with only a remote order wire telephone set. In these configurations each unused input and output is terminated by a 600-ohm resistor.

4-32. ORDER WIRE RECEPTION.

4-33. CONFIGURATION I. The level of the input signal (IN #1) from the remote order wire telephone set is raised to the same level as the local order wire input signals, by vf line amplifier #1 (See fig. 6-1).

4-34. This input signal (IN #1) is applied to jack 1A1J1 terminals 1 and 2 from AMP jack 1A1J38. The output of the vf line amplifier at jack 1A1J1 terminals 3 and 4 is routed to the service channel and monitor speaker panel through terminal board 1A1TB2, row 1, terminals 3 and 4, REC LINE jacks 1A1J17 and 1A1J16, REC EQUIP jacks 1A1J30 and 1A1J31, terminal board 1A1TB1, row 4, terminals 1 and 2, and 1A1TB1, row 5, terminals 1 and 2.

4-35. The input signal from the first local order wire telephone set (IN #2) is connected to terminal board 1A1TB2, row 8, terminals 3 and 4, and routed to the service channel and monitor speaker panel through 1A1TB1, row 3, terminals 3 and 4, REC LINE jacks 1A1J15 and 1A1J14, REC EQUIP jacks 1A1J28 and 1A1J29, terminal board 1A1TB1, row 4, terminals 3 and 4, and 1A1TB1, row 5, terminals 5 and 6.

4-36. The input signal from the second local order wire telephone set (IN #3) is connected to terminal board 1A1TB2, row 8, terminals 5 and 6 and is routed to the service channel and monitor speaker panel through REC LINE jacks 1A1J12 and 1A1J13, REC EQUIP jacks 1A1J26 and 1A1J27, terminal board 1A1TB1, row 4, terminals 5 and 6, and 1A1TB1, row 6, terminals 3 and 4.

4-37. CONFIGURATION II. The input signals from the remote order wire telephone set and the first local order wire telephone set (IN #1 and IN #2) are received, amplified, and routed in the same manner as configuration I. (See fig. 6-2.) Since there is no second local order wire telephone set used with configuration II, the input to the service channel and monitor speaker panel (IN #3) is terminated by 600-ohm resistor 1A1R17. Resistor 1A1R17 is connected through terminal board 1A1TB1, row 6, terminals 3 and 4, and 1A1TB1, row 7, terminals 1 and 2.

4-38. CONFIGURATION III. The input signal from the remote order wire telephone set (IN #1) is received, amplified and routed in the same manner as configuration I. (See fig. 6-3.) Since there are no local order wire telephone sets used with configuration III both inputs (IN #2 and IN #3) are terminated by 600-ohm resistors. The second input (IN #2) is terminated by resistor 1A1R17 through terminal board 1A1TB1, row 5, terminals 5 and 6 and 1A1TB1, row 7, terminals 1 and 2. The third input (IN #3) is terminated by resistor 1A1R19 through terminal board 1A1TB1, row 6, terminals 3 and 4, and 1A1TB1, row 7, terminals 5 and 6.

4-39. ORDER WIRE TRANSMISSION.

4-40. CONFIGURATION I. The three outputs

(one to a remote and two to local order wire telephone sets) are raised to a common level established for test and patching purposes, by vf line amplifiers in the control unit. (See fig. 6-1.)

4-41. After being amplified, the remote order wire output is then attenuated to the proper level for transmission via the exciter.

4-42. The remote order wire telephone set output (OUT #1) from the service channel and monitor speaker panel enters the control unit at terminal board 1A1TB1, row 5, terminals 3 and 4. This signal is then routed to vf line amplifier #2 via terminal board 1A1TB2, row 1, terminals 5 and 6, and terminals 1 and 2 of jack 1A1J2. The output of the vf amplifier at terminals 3 and 4 of 1A1J2 is routed to the attenuator pad by way of terminal board 1A1TB2, row 2, terminals 1 and 2, SEND EQUIP jacks 1A1J36 and 1A1J37, SEND LINE jacks 1A1J22 and 1A1J23, terminal board 1A1TB1, row 1, terminals 1 and 2, and terminal board 1A1TB2, row 4, terminals 3 and 4.

4-43. Attenuation of the remote order wire telephone set output signal (OUT #1) is accomplished by a two part attenuator pad. This attenuator pad consists of: a fixed socket 1A1J5 with four resistors 1A1R1, 1A1R2, 1A1R3 and 1A1R4 mounted on it, and plug-in resistor assembly 1A1A5 with three resistors 1A1A5R1, 1A1A5R2 and 1A1A5R3 mounted within in. After attenuation the output to the exciter is connected to pad jack 1A1J39 through terminals 1 and 2 of socket 1A1J5.

4-44. The output signal to the first local order wire telephone set (OUT #2) enters the control unit from the service channel and monitor speaker panel at terminal board 1A1TB1, row 6, terminals 1 and 2. The signal (OUT #2) is then routed to vf line amplifier #3 via terminal board 1A1TB2, row 2, terminals 3 and 4, and jack 1A1J3, terminals 1 and 2. The output of vf line amplifier #3 at terminals 3 and 4 of 1A1J3 is routed to the first local order wire telephone set by way of terminal board 1A1TB2, row 2, terminals 5 and 6, terminal board 1A1TB1, row 2, terminals 3 and 4, SEND EQUIP jacks 1A1J34 and 1A1J35, SEND LINE jacks 1A1J20 and 1A1J21, terminal board 1A1TB1, row 1, terminals 3 and 4, and terminal board 1A1TB2, row 7, terminals 3 and 4.

4-45. The output signal to the second local order wire telephone set (OUT #3) enters the control unit from the service channel and monitor speaker panel at terminal board 1A1TB1, row 6, terminals 5 and 6. The signal (OUT #3) is then routed to vf line amplifier #4 via terminal board 1A1TB2, row 3, terminals 1 and 2, and jack 1A1J4, terminals 1 and 2. The output of vf line amplifier #4 at terminals 3 and 4 of jack 1A1J4 is routed to the second local order wire telephone set by way of terminal board 1A1TB2, row 3, terminals 3 and 4, terminal board 1A1TB1, row 2, terminals 5 and 6, SEND EQUIP jacks 1A1J32 and 1A1J33, SEND LINE jacks 1A1J18 and 1A1J19, terminal board 1A1TB1, row 1, terminals 5 and 6, and terminal board 1A1TB2, row 7, terminals 5 and 6.

4-46. CONFIGURATION II. The output signals to the remote and the first local order wire telephone set (OUT #1 and OUT #2) are amplified, attenuated and routed in the same manner as in configuration I. (See fig. 6-2.) Since there is no second local order wire telephone set used with configuration II, the output from the service channel and monitor speaker panel (OUT #3) is terminated by 600-ohm resistor 1A1R18. Resistor 1A1R18 is connected through terminal board 1A1TB1, row 6, terminals 5 and 6, and 1A1TB1, row 7, terminals 3 and 4.

4-47. CONFIGURATION III. The output signal to the remote order wire telephone set (OUT #1) is amplified, attenuated and routed in the same manner as in configuration I. (See fig. 6-3.) Since there are no local order wire telephone sets used in conjunction with configuration III both outputs (OUT #2 and OUT #3) are terminated by 600-ohm resistors. The second output (OUT #2) is terminated by resistor 1A1R18 through terminal board 1A1TB1, row 6, terminals 1 and 2, and 1A1TB1, row 7, terminals 3 and 4. The third output (OUT #3) is terminated by resistor 1A1R20 through terminal board 1A1TB1, row 6, terminals 5 and 6, and 1A1TB1, row 8, terminals 1 and 2.

4-48. SPARE ATTENUATOR SOCKETS. Three attenuator sockets, 1A1J6, 1A1J7 and 1A1J8 and their associated resistors are spares; no plug-in resistor assemblies are supplied for them.

4-49. VF LINE AMPLIFIER.

4-50. The vf line amplifier is a two-stage transistorized amplifier providing a gain of up to 38 db at audio frequencies. Refer to the sche-

matic diagram, figure 6-4, for the following discussion.

4-51. The input is transformer-coupled by T1 to the DB control R1. DB control R1 varies the level of the input signal to input transistor Q1, thereby controlling the gain of the vf line amplifier.

4-52. After being amplified by the first stage the signal is transformer-coupled by T2 to transistor Q2, the second stage of amplification. The output signal is coupled by impedance matching transformer T3. An auxiliary winding of T3 connects to the MON test jacks J1 and J2, and plug P 1 pins 5 and 6.

4-53. The vf line amplifier is stabilized by inverse feedback from the collector of output transistor Q2 to the emitter of input transistor Q1 through coupling capacitors C1 and C2, and voltage dropping resistor R6.

4-54. The base-emitter bias for each transistor is provided by the forward voltage drop across diodes CR1 and CR2 in series for transistor Q2, and diode CR3 for transistor Q1.

4-55. Resistor R11 drops the -24 vdc input voltage to the -12 vdc transistor circuit operating voltage. Diode CR4 prevents damage to the transistors if the input voltage polarity is inadvertently reversed.

4-56. SERVICE CHANNEL AND MONITOR SPEAKER PANEL.

4-57. Refer to figure 6-5 for the discussion of the service channel and monitor speaker panel.

4-58. ORDER WIRE RECEPTION.

4-59. 4-WAY, 4-WIRE BRIDGE. All order wire signals, voice or 2600-cps tone signal, are passed through the 4-way, 4-wire bridge in the service channel and monitor speaker panel (fig. 6-5). Any input is not only applied to the bridge amplifier, through the 4-way, 4-wire bridge, but also is relayed in party-line fashion to the other connected order wire telephone sets.

4-60. The 4-way, 4-wire bridge is a passive resistance bridge hybrid network. It is comprised of twenty-four identical 750-ohm resistors arranged so that a 600-ohm input and output impedance is provided for each bridge leg. Proper impedance matching can only occur when all input and output pairs are terminated in 600 ohms.

4-61. The attenuation between any leg input to all leg outputs is 15 db. The attenuation between any two leg inputs or two leg outputs is at least 70 db.

4-62. BRIDGE AMPLIFIER. The bridge amplifier compensates for the inherent losses (15 db) in the 4-way, 4-wire bridge. It is connected to the bridge output leg used for local reception.

4-63. The output of the 4-way, 4-wire bridge (voice frequency or tone signal) is applied to input transformer 1A2A4T1. The output of this transformer drives a conventional two-stage transistor amplifier. A negative feedback network consisting of resistors 1A2A4R9 and 1A2A4R10 and capacitor 1A2A4C4 is provided to stabilize the amplifier.

4-64. The gain of the bridge amplifier is varied by the BRIDGE AMPL LEV ADJ control 1A2A4R8 which varies the bias of the first stage.

4-65. Test jacks 1A2A4J1 and 1A2A4J2 (BRIDGE AMP LEV T and R respectively) are provided to monitor the bridge output.

4-66. The output of the bridge amplifier from the orn-grn winding of transformer 1A2A4T2 is supplied to the signal tone receiver, the speaker amplifier and the TEL SET REC LEV ADJ pad 1A2R12. From 1A2R12 the signal is applied to either the two-wire extension circuit through the normally closed contacts of transfer relay 1A2K2, or to the handset. The signal is applied to the handset only if the handset is plugged into TEL SET jacks 1A2J1 and 1A2J2, through the normally open contacts of relay 1A2K2 and the attenuator pad consisting of 1A2R4, 1A2R5 and 1A2R6. The TEL SET REC LEV ADJ pad 1A2R12 is used to vary the volume level in the handset, either extension or local, to suit the operator.

4-67. When the handset is inserted into TEL SET jacks 1A2J1 and 1A2J2, ground is removed from 1A2J1 contact 2 thereby disabling the speaker amplifier; ground is also applied to the coil of transfer relay 1A2K2 through contacts 5 and 6. When 1A2K2 is grounded it energizes, removing the signal from the two-wire extension circuit.

4-68. SIGNAL TONE RECEIVER. The signal tone receiver provides a means for actuating the signaling buzzer 1A2DS2 under the control of a distant station.

4-69. The signal tone receiver consists of a 2600-cps bandpass filter, a two-stage transistor audio amplifier, a full wave rectifier circuit and a transistor switching circuit which controls a dpdt relay.

4-70. The voice or tone signal is applied to the 2600-cps bandpass filter 1A2A1FL1 which allows only the 2600-cps signaling tone to pass. The signaling tone is amplified by the two transistor amplifier stages, 1A2A1Q1 and 1A2A1Q2, connected in cascade, rectified by diodes 1A2A1CR1 and 1A2A1CR2 and applied to the base of switching transistor 1A2A1Q3. The coil of relay 1A2A1K1 is connected as the collector load of transistor 1A2A1Q3. When the rectified signaling tone is applied to the base of switching transistor 1A2A1Q3, relay 1A2A1K1 is energized and buzzer 1A2DS2, connected between normally open contact 7 of relay 1A2A1K1 and -24 vdc, is operated. The other normally open contacts of relay 1A2A1K1, pins 5 and 6, are extended to terminal board 1A2TB1, terminals 13 and 14 where 20 cps from the 20-cycle generator is applied and then routed to an external ringer, if used.

4-71. The sensitivity of the signal tone receiver is adjusted by varying the gain of transistor 1A2A1Q1. This is accomplished by controlling the transistor bias with SIG TONE RCVR SENS ADJ control 1A2A1R7. Bias for transistor 1A2A1Q2 is provided by emitter resistor 1A2A1R12 and bypass capacitor 1A2A1C6.

4-72. Resistor 1A2A1R14, capacitor 1A2A1C8 and diode 1A2A1CR4 make up a low impedance discharge network to speed the operation of relay 1A2A1K1.

4-73. SIG TONE RCVR LEV T and R jacks 1A2A1J1 and 1A2A1J2 monitor the input to the signal tone receiver.

4-74. Base-emitter bias for transistor 1A2A1Q3 is provided by the forward voltage drop across diode 1A2A1CR3.

4-75. SPEAKER AMPLIFIER. The speaker amplifier amplifies the voice signal for application to the monitor speaker. It is a conventional three stage transistor amplifier with a maximum gain of 20 db.

4-76. The input transformer coupled by 1A2A2T1 to transistor 1A2A2Q1, is varied by the SPKR AMPL LEV ADJ control 1A2A2R5 which varies the gain of the amplifier.

4-77. The signal is amplified by transistor 1A2A2Q1 and applied directly to the emitter follower 1A2A2Q2. The output of the emitter follower is coupled through variable resistor 1A2A2R15 to transistor 1A2A2Q3 for further amplification. The output of the speaker amplifier is transformer coupled by 1A2A2T2 to the monitor speaker LS1.

4-78. Resistor-capacitor combinations 1A2A2R10 and 1A2A2C3, and 1A2A2R14 and 1A2A2C5 provide bias for transistors 1A2A2Q1 and 1A2A2Q3 respectively.

4-79. Stability for the amplifier is provided by a negative feedback network consisting of capacitor 1A2A2C4 and resistor 1A2A2R11.

4-80. Ground for the speaker amplifier is provided through normally closed contacts 2 and 3 of TEL SET jack 1A2J1. When the handset is plugged into the TEL SET jacks the ground circuit is opened, the speaker amplifier is disabled, the monitor speaker is silenced and the voice signal can be heard over the handset receiver.

4-81. ORDER WIRE TRANSMISSION.

4-82. The handset transmitter is connected to the 4-way, 4-wire bridge through contact 1 of TEL SET jack 1A2J1 and contact 2 of TEL SET jack 1A2J2, coupling capacitor 1A2C1, line impedance matching transformer 1A2T1, the normally open contacts of relay 1A2K2 and the normally closed contacts of relay 1A2K1. Relay 1A1K2 is energized when the coil of 1A2K2 is grounded through contacts 5 and 6 of TEL SET jack 1A2J1 by the insertion of the handset into TEL SET jacks 1A2J1 and 1A2J2.

4-83. Retard coil 1A2L1 passes dc current but blocks speech signals from returning to the power supply. Diodes 1A2CR1 and 1A2CR2 act to limit the amplitude of the signal applied to the 4-way, 4-wire bridge.

4-84. TWO-WIRE EXTENSION CIRCUIT. When the handset is removed and relay 1A2K2 is de-energized the order wire signal from the extension handset is applied to the two-wire extension circuit. The two-wire extension circuit consists of differential transformers 1A2T2 and

1A2T3, connected in a four-wire to two-wire hybrid arrangement, and a level compensating network. The level compensating network, consisting of resistor 1A2R17 and capacitor 1A2C2, is provided to equalize transmit levels from the extension handset with those from the local handset.

4-85. SIGNAL TONE TRANSMITTER. The signal tone transmitter generates the 2600-cps tone used for signaling. It consists of a conventional L/C transistor oscillator circuit, followed by a variable gain transistor amplifier. The frequency determining elements are capacitors 1A2A3C2, 1A2A3C7 and inductor 1A2A3L1. Feedback capacitor 1A2A3C3 provides oscillator stability. Signal tone transmitter output level is determined through adjustment of the amplifier stage bias by means of the SIG TONE XMTR LEV ADJ control 1A2A3R10.

4-86. The output of the signal tone transmitter is applied to test jacks SIG TONE LEV T and R 1A2A3J1 and 1A2A3J2, and to the 4-way, 4-wire bridge through the normally open contacts of relay 1A2K1. Relay 1A2K1, in turn, is energized through the momentary contact, pushbutton SIG switch 1A2S1. Therefore, whenever the SIG pushbutton is depressed the 2600-cps signal from the signal tone transmitter is applied to the 4-way, 4-wire bridge.

4-87. Signals applied to the 4-way, 4-wire bridge are relayed through the bridge and vf line amplifiers in the control unit to other connected order wire telephone sets. See paragraph 4-59 for a more detailed description of the 4-way, 4-wire bridge.

4-88. VOLTAGE DROPPING RESISTORS AND FUSING.

4-89. Various voltage dropping resistors are provided in the service channel and monitor speaker panel to adapt the chassis for 48-volt operation. Since this chassis, in this application, is used with the 24-volt power supply, these resistors are strapped out. The voltage dropping resistors are as follows: 1A2R1, 1A2R13, 1A2R16, 1A2A1R1, 1A2A2R4, 1A2A3R1 and 1A2A4R1. Fuse 1A2F1 provides circuit protection for the 24 volts dc. A voltage divider consisting of resistors 1A2R19 and 1A2R20, connected between the 24-volt input and ground, provides the 20 volt dc source. This line is fused by 1A2F2.

4-90. POWER SUPPLY.

4-91. The power supply (fig. 6-6) is comprised of the 24-vdc power supply and the 20-cycle signal generator.

4-92. 24-VDC POWER SUPPLY.

4-93. The 24-vdc power supply is a conventional circuit utilizing full wave rectification and pi-type filtering. It provides operating voltage for the other circuits of the order wire telephone set.

4-94. The 115-vac input is applied to voltage regulating transformer 1A3T2 through AC INPUT fuse 1A3F1. Capacitor 1A3C1 connected across winding 6 and 7 of transformer 1A3T2 tends to keep 1A3T2 operating near saturation, thereby providing some voltage regulation. The center-tapped output from the secondary is rectified by diodes 1A3CR5 and 1A3CR6.

4-95. The rectified voltage is filtered by a capacitor input pi-type filter consisting of capacitors 1A3C2 and 1A3C3 and inductor 1A3L1.

4-96. The filtered voltage is made available at terminal board 1A3TB1, terminals 1 and 2 through DC OUTPUT fuse 1A3F2. Resistor 1A3R7 acts as a bleeder resistor.

4-97. 20-CYCLE SIGNAL GENERATOR.

4-98. The 20-cycle signal generator is a transistorized, low frequency, transformer coupled multivibrator used to provide 90-volt, 20-cycle ringing voltage to an extension ringer.

4-99. When power is initially turned on current flows from the negative source through transistor Q4 (forward biased through leakage resistor R4), the primary winding of transformer T1 (from terminal 1 to terminal 2), transistor Q1 (forward biased through leakage resistor R1) to variable resistor R8, the positive source. The initial current flow causes voltages to be induced in secondary windings 5-6, 7-8, 9-10, and 11-12 which increase the forward bias on transistors Q4 and Q1 and provide a reverse bias for transistors Q2 and Q3.

4-100. When the core of transformer T1 becomes saturated the flux field starts to collapse with a resultant instantaneous reversal of voltage polarity in the secondary windings. Windings 7-8 and 11-12 now provide reverse bias to transistors Q4 and Q1 respectively, driving them towards cut-off. Windings 5-6 and 9-10 now provide forward bias to transistors Q2 and Q3 respectively, allowing them to conduct. The current path is now from the negative source through

transistor Q3, the primary winding (from terminal 2 to terminal 1), transistor Q2 and back to variable resistor R8, the positive source. When the transformer again reaches saturation the secondary winding polarity again reverses and the entire cycle starts to repeat.

4-101. The positive polarity is thus alternately switched from terminal 1 and then to terminal 2 of the primary winding. This alternating voltage is coupled to the output winding, terminals 3 and 4.

4-102. The amplitude of the output signal is adjusted by variable resistor R9 in series with secondary winding 3-4. This control is normally set for a 90-volt output.

4-103. Variable resistor R8 is used as a frequency adjust control by varying the amplitude of the source voltage, and therefore, the saturating time of transformer T1. This control is normally set for 20 cycles.

4-104. Resistors R2, R3, R5 and R6 are used to limit base drive current to a safe value.

4-105. Diodes CR1, CR2, CR3 and CR4 are used for transient voltage protection of their respective transistors.

CHAPTER 5

MAINTENANCE

5-1. INTRODUCTION. This chapter contains the instructions required to maintain the order wire telephone set. Section I of this chapter establishes standardized work methods and simplified step-by-step job instructions for the preventive maintenance of this equipment. Section II contains instructions for organizational/field maintenance procedurers which supplement the procedures contained in Section I.

SECTION I

PREVENTIVE MAINTENANCE

5-1.1 GENERAL.

5-1.2. This section contains the routines required for preventive maintenance of the order wire telephone set. The instructions in Section II supplement these routines.

5-1.3. POWER SUPPLY CHECK.

5-1.4. The purpose of this routine is to determine if the proper supply voltages are present for operation of the order wire telephone set. A Simpson 260RT Multimeter (FSN 6625-643-1693) is used for this test.

Note: The order wire telephone set has no on-off switch. Power is applied by connecting the power cable from the 120-vac power source.

a. Insure that the PWR ON lamp located on the service channel and monitor speaker panel is glowing.

b. Check the voltage at the 90 VAC jacks located on the power supply panel. The meter reading must indicate between 165 and 185 volts ac; this is the unloaded condition of the circuit.

c. Check the voltage at the 24 VDC jacks located on the power supply panel. The meter reading must indicate between 21 and 27 volts dc.

5-1.5. ORDER WIRE TELEPHONE SET OPERATIONAL CHECK.

5-1.6. The purpose of this routine is to determine if the order wire telephone set is operational. No test equipment is required.

a. Insure that the PWR ON lamp located on the service channel and monitor speaker panel is glowing.

b. Plug the handset into the TEL SET jack.

c. Signal a remote station by depressing the SIG pushbutton; the remote station should answer. Correct operation is indicated by the ability to communicate with the remote station in a normal conversational voice, utilizing the handset.

d. Remove the handset; the signal from the remote station must be heard on the monitor speaker.

e. Replace the handset and request that the remote station operator signal you. The buzzer must sound.

5-1.7. GENERAL INSPECTION AND CLEANING.

5-1.8. This routine provides general inspection and cleaning procedures for components of the order wire telephone set. No test equipment is required. Materials required for this routine include a sasbrush-type cleaning brush (non-metallic), a cleaning cloth, a hand-type vacuum cleaner, and handtools as determined by inspection.

a. Remove ac power from the order wire telephone set.

Note: No provision is made in the order wire telephone set for local turn off. Either remove ac power remotely (for example, circuit breaker for rack) or remove power supply ac power cord from associated receptacle.

b. Loosen the retaining screws on the front panel of the service channel and monitor speaker panel. Grasp the handle and pull the unit out far enough that the inside components may be observed and cleaned.

c. Inspect circuit boards for cracks, dirt, and corrosion.

d. Inspect capacitors for bulges, leakage, and corrosion.

e. Inspect resistors for cracks, bulges, discoloration, and other evidence of overheating.

f. Inspect all wiring for loose connections, frayed or damaged insulation, and secure clamping and lacing.

g. Inspect connectors and receptacles for solid mounting and cleanliness.

h. Inspect solder points for cold solder joints and excessive solder.

i. Inspect panel controls for loose or missing controls.

j. Inspect indicator lamp for secure mounting and damaged or missing lens.

k. Inspect fuse and fuseholders for damage and for proper fuse ratings.

l. Inspect the speaker cone for tears.

m. Inspect the telephone jack for damaged or broken connections and insecure mounting.

n. Clean the area inside the unit with the sashbrush and vacuum cleaner, taking precaution not to disturb the components while cleaning.

o. Push in the service channel and monitor speaker panel unit and secure by tightening the retaining screws.

p. Check the mounting of the voice frequency amplifiers and attenuator pad on the control unit.

q. Clean the external portions of the order wire telephone set with a cleaning cloth.

r. Return ac power to order wire telephone set.

5-1.9. CHASSIS AND PANEL CLEANING.

5-1.10. The purpose of this routine is to remove all rust or corrosion and to clean exposed metal surfaces of the order wire telephone set. No test equipment is required. The materials required for this routine include a sashbrush-type cleaning brush (non-metallic), a cleaning cloth, solvent (Federal Specification P-S-661), and fine steel wool.

a. Inspect all exposed metal surfaces for rust.

b. Remove rust with fine steel wool. All loosened foreign matter should be removed from all surfaces with a soft brush or cloth.

c. Clean all surfaces with a solvent-dampened cloth and then wipe surfaces with a dry cloth.

d. Return all cleaning materials to proper place.

5-1.11. CLEANING JACK SPRINGS AND JACK SLEEVES.

5-1.12. This routine provides instructions for cleaning the springs and sleeves of the order wire telephone set jacks. One jack is located on the service channel and monitor speaker panel; the other jacks are located on the control unit. No test equipment is required.

5-1.13. MATERIALS REQUIRED

a. Orangestick, Federal Stock Number 5120-577-6000(q), or equivalent.

b. Light oil, Federal Specification VV-L-820B, or equivalent.

c. Solvent, Federal Specification P-S-661.

d. Lint-free cloth.

5-1.14. PROCEDURE

a. Mix 17 drops of light oil to 1 ounce of solvent.

Note: Make solution in quantities of 2 ounces or less depending upon amount of cleaning to be performed.

b. Cut strips of lint-free cloth approximately 1 foot long and 1-1/2 inches wide.

c. Starting at one end of the orangestick, wrap the cloth spirally along the length of the orangestick. The wrap should be approximately 3 turns of cloth per inch on the orange stick.

d. Hold the free end of the cloth and orangestick between the thumb and forefinger. Moisten the wrapped end of the orangestick with the oil and solvent solution.

e. Insert the moistened end of the wrapped orangestick into the telephone jack. Rotate back and forth, contacting all inner surfaces of the sleeve.

f. Continue the cleaning process, rewrapping the orangestick as the cloth soils, until the cloth appears clean when removed from the jacks.

g. Clean all jacks in the same manner.

h. Return all cleaning materials to proper place.

SECTION II
ORGANIZATIONAL/FIELD MAINTENANCE

5-2. GENERAL.

5-3. This section provides maintenance instructions on an equipment level, using test equipment listed in table 5-1. The instructions supplement the procedures contained in section I.

In performing organizational/field maintenance according to the instructions, reference should be made to the schematics contained in Chapter 6 of this manual.

5-4. TEST EQUIPMENT.

5-5. Table 5-1 lists all of the test equipment required for organizational/field maintenance.

5-6. The test equipment characteristics shown in table 5-1 do not necessarily represent the maximum capabilities of the test equipment. Rather, the characteristics shown are those which are applicable to testing the order wire telephone set.

5-7. PREVENTIVE MAINTENANCE.

5-8. Routine preventive maintenance procedures are contained in section I.

5-9. GENERAL CORRECTIVE MAINTENANCE.

5-10. To keep the order wire telephone set operating efficiently, you must know the principles of operation as explained in Chapter 4. Troubleshooting of the order wire telephone set should be carried out in a normal manner.

5-11. TEST POINTS AND JACKS.

5-12. Table 5-2 lists all of the test points and test jacks on the order wire telephone set; giving the unit location and the circuit function. These test points and jacks are called out in the referenced illustrations.

5-13. All order wire test jack signals are at a 0 dbm level. These test jacks can be used for patching the order wire signals into external equipment, as required.

5-14. DC VOLTAGE REQUIREMENT AND SOURCE.

5-15. All components of the order wire telephone set operate from a 24-volt dc source supplied by the integrated power supply.

5-16. PERFORMANCE STANDARDS AND PERFORMANCE TESTS.

5-17. Performance tests are covered in section I.

5-18. ALIGNMENT AND ADJUSTMENT.

5-19. The following procedures comprise all the alignment and adjustment required after installation, repair, or component replacement.

Table 5-1. Equipment Required for Organizational/Field Maintenance

Federal Stock No.	Nomenclature	Characteristics
625-724-8582	Multimeter AN/PSM-6( )	Capable of measuring at least 0-300 vac, at frequencies of between 15 and 25 cycles per second, and 0-50 vdc. With an accuracy of at least ±3%
625-643-1670	Vacuum Tube Voltmeter ME-30A/U	Capable of measuring at least -20 to +20 dbm at frequencies of between 500 and 3000 cycles per second. With an accuracy of at least ±3%
	Oscilloscope (Tektronix Model 503)	Capable of displaying, and calibrated to measure, a waveform of 15 to 25 cycles per second, between 200 and 300 volts in amplitude. With a calibration accuracy of ±3%
625-567-5837	Bridging Network (Hewlett-Packard AC60A)	Capable of bridging the signal tone transmitter to allow measurements without loading
625-539-8584	Test Oscillator (Hewlett-Packard Model 650A)	Capable of generating signals at frequencies of 500 to 3000 cycles at 3 volts into a 600-ohm resistive load. With a calibration accuracy of ±3%
	Terminating Plug (Lenkurt No. 670a)	Twin banana plug with a 600-ohm resistor between the plugs
995-577-8130	Test Cord (Lenkurt No. 613A)	Three foot cable with double tip sleeve plugs at each end
995-725-5846	Test Cord (Lenkurt No. 664A)	Six foot cable with single tip-ring-sleeve plug on one end and twin banana plugs on the other end

Table 5-2. Test Points and Jacks

Unit/Test Point or Jack	Monitor Function
ontrol Unit (see fig. 5-1):	
J10 and J11	Spare
J12 and J13	Order wire input from 2nd local order wire telephone set (if used) line side
J14 and J15	Order wire input from 1st local order wire telephone set (if used) line side
J16 and J17	Order wire input from remote order wire telephone set, line side
J18 and J19	Order wire output to 2nd local order wire telephone set (if used) line side
J20 and J21	Order wire output to 1st local order wire telephone set (if used) line side
J22 and J23	Order wire output to remote order wire telephone set, line side
J24 and J25	Spare
J26 and J27	Order wire input from 2nd local order wire telephone set (if used) equipment side
J28 and J29	Order wire input from 1st local order wire telephone set (if used) equipment side
J30 and J31	Order wire input from remote order wire telephone set, equipment side
J32 and J33	Order wire output to 2nd local order wire telephone set (if used) equipment side
J34 and J35	Order wire output to 1st local order wire telephone set (if used) equipment side
J36 and J37	Order wire output to remote order wire telephone set, equipment side
f Line Amplifier (see fig. 5-2): MON (2)	Vf line amplifier output
ervice Channel and Monitor Speaker Panel (see ig. 5-3):	
SIG TONE RCVR LEV T and SIG TONE RCVR LEV R	Input to signal tone receiver
SIG TONE XMTR LEV T and SIG TONE XMTR LEV R	Signal tone transmitter output
BRIDGE AMPL LEV T and BRIDGE AMPL LEV R	Bridge amplifier output
ower Supply (see fig. 5-4):	
90 VAC (2)	20 cycle signal generator output
Plus and Minus 24VDC	Power supply, 24 volt output

5-20. VF LINE AMPLIFIER ALIGNMENT. The vf line amplifiers are aligned by applying a 1000 cps, -10 dbm signal and adjusting each vf line amplifier in turn for an output of 0 dbm.

5-21. To align the vf line amplifiers proceed as follows:

a. Turn on the test oscillator and allow it to warm up for 15 minutes. After the 15-minute warm-up period, adjust the test oscillator for 1000 cps.

b. Insert the 600-ohm terminating plug into the input terminals of the vtvm. Connect vtvm test leads into the 600-ohm terminating plug.

c. Connect the test leads of the vtvm to the test oscillator and adjust the oscillator for a -10 dbm indication on the vtvm.

d. Disconnect the vtvm from the oscillator.

e. Connect the oscillator to the order wire input jack located on an associated patch panel.

NOTE

In the operations van of the AN/MRC-85 radio set, this jack is labeled OW IN LIFT and is located on the bottom row of the base band and order wire patch panel.

f. Replace the vtvm test leads with a type 664A test cord.

g. Connect the test cord to jacks J16 and J17 (fig. 5-1). The vtvm should indicate 0 dbm. If it does not, remove the protective cap from the DB control on vf line amplifier #1 (see fig. 5-2) and loosen the locknut with the 1/2-inch wrench. Rotate the DB control with a screwdriver until an indication of 0 dbm is obtained.

h. Tighten locknut and replace protective cap.

i. Disconnect the vtvm from jacks J16 and J17 and connect to jacks J34 and J35. The vtvm should indicate 0 dbm. If it does not, remove the protective cap from the DB control on vf line amplifier #3 and loosen the locknut with the 1/2-inch wrench. Rotate the DB control with a screwdriver until an indication of 0 dbm is obtained.

j. Tighten locknut and replace protective cap.

k. Disconnect the vtvm from jacks J34 and J35 and connect to jacks J32 and J33. The vtvm should indicate 0 dbm. If it does not, remove the protective cap from the DB control on vf line amplifier #4 and loosen the locknut with the 1/2-inch wrench. Rotate the DB control

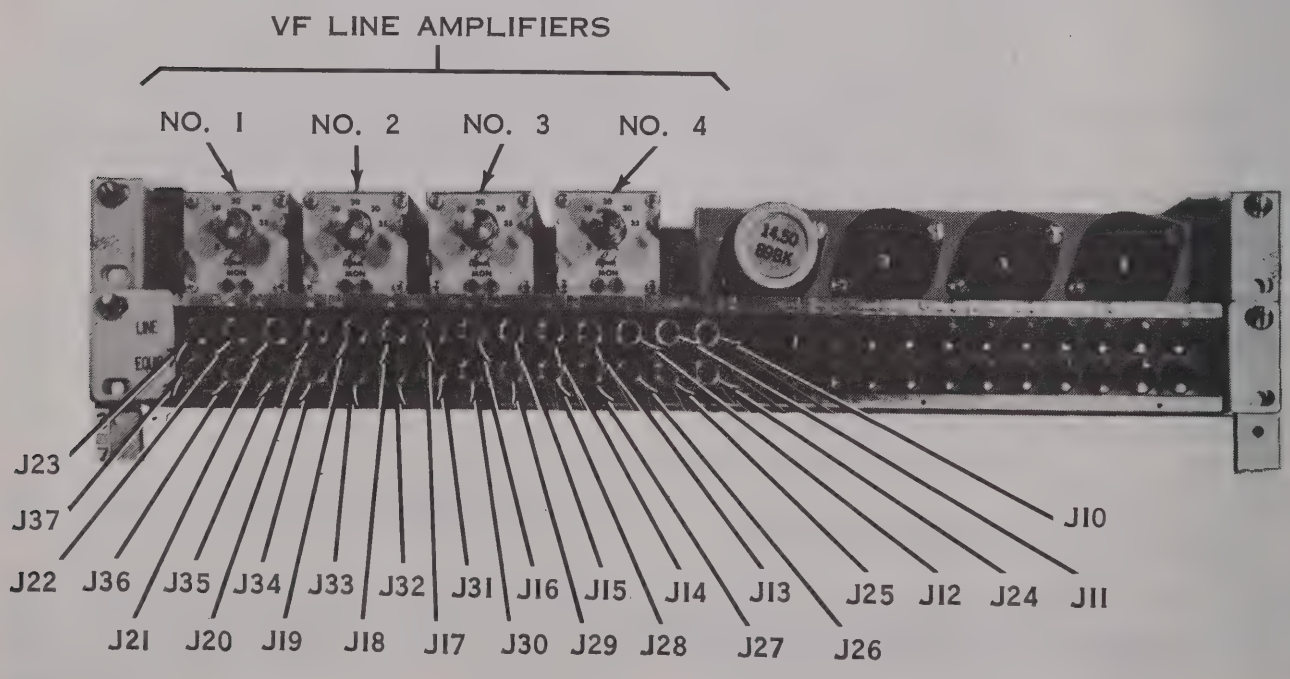

Figure 5-1. Controls Unit Alignment Controls and Test Jacks

with a screwdriver until an indication of 0 dbm is obtained.

l. Tighten locknut and replace protective cap.

m. Connect the patch cord from jacks J16 and J17 to jacks J34 and J35.

n. Disconnect the vtvm from jacks J32 and J33 and connect to jacks J36 and J37. The vtvm should indicate 0 dbm. If it does not, remove the protective cap from the DB control on vf line amplifier #2 and loosen the locknut with the 1/2-inch wrench. Rotate the DB control with a screwdriver until an indication of 0 dbm is obtained.

o. Tighten locknut and replace protective cap.

p. Remove patch cord, oscillator and vtvm.

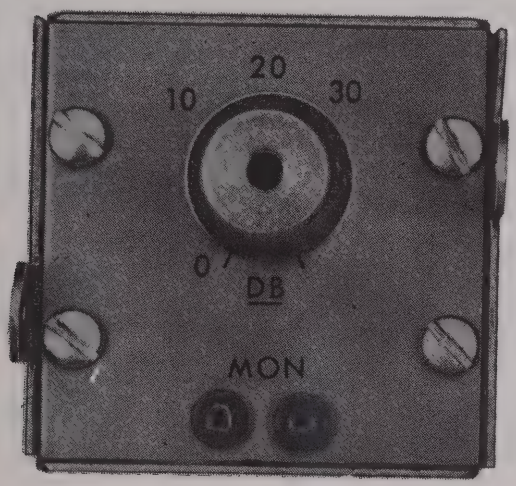

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Figure 5-2. VF Line Amplifier, Control and Test Points

5-22. SERVICE CHANNEL AND MONITOR SPEAKER PANEL ALIGNMENT.

5-23. To align the service channel and monitor speaker panel, refer to figure 5-3 and proceed as follows:

a. Set the vtvm range switch to the +10 DB range.

b. Set the bridging network for bridging and insert into vtvm. Connect test leads into bridging network.

c. Insert the vtvm probes into the SIG TONE XMTR LEV T and R test points.

d. Depress and hold the SIG pushbutton; the vtvm should indicate -5 dbm. If it does not, loosen the locknut on the SIG TONE XMTR LEV ADJ and adjust the control for an indication of -5 dbm on the vtvm.

CAUTION

Disconnect the vtvm from the T and R jacks before releasing SIG pushbutton.

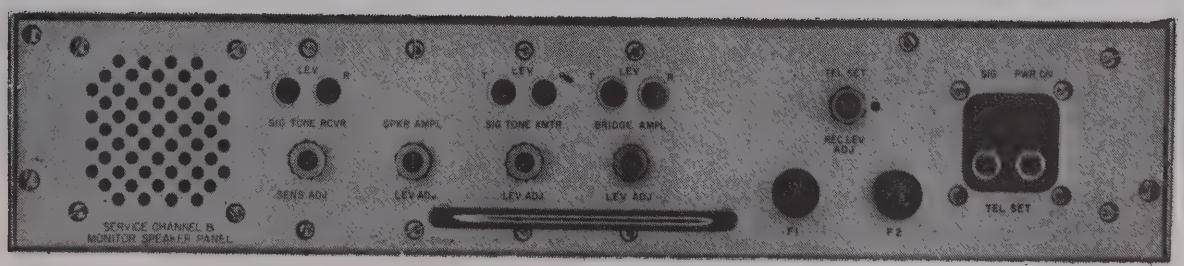

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Figure 5-3. Service Channel and Monitor Speaker Panel Alignment Controls and Test Points

e. Remove bridging network.

f. Tighten locknut on SIG TONE XMTR LEV ADJ.

g. Disconnect handset from TEL SET jacks.

h. Perform steps a through e of paragraph 5-21.

i. Insert vtvm test lead probes into the BRIDGE AMPL LEV T and R test jacks.

j. The vtvm should indicate 0 dbm. If it does not, loosen the locknut on the BRIDGE AMPL LEV ADJ. Rotate the BRIDGE AMPL LEV ADJ with a screwdriver until the vtvm indicates 0 dbm.

k. Tighten the locknut on the BRIDGE AMPL LEV ADJ control.

l. Using the 9/16-inch wrench, loosen the locknut on the SPKR AMPL LEV ADJ control.

m. With the screwdriver, rotate the SPKR AMPL LEV ADJ for desired output volume.

n. Replace handset and tighten SPKR AMPL LEV ADJ locknut.

o. Remove the test oscillator from the order wire input jack.

p. Adjust the test oscillator for 2600 cps.

q. Insert the 600-ohm terminating plug into the input terminals of the vtvm. Connect the vtvm test leads into the 600-ohm terminating plug.

r. Connect the test leads of the vtvm to the test oscillator and adjust the oscillator for a -12 dbm indication on the vtvm.

s. Disconnect the vtvm from the oscillator.

t. Connect the oscillator to the order wire input jack using the type 664A test cord.

u. Using the 9/16-inch wrench, loosen the locknut on the SIG TONE RCVR SENS ADJ control.

v. Using the screwdriver slowly rotate the SIG TONE RCVR SENS ADJ control until the buzzer sounds.

w. Tighten the locknut on the SIG TONE RCVR SENS ADJ control.

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Figure 5-4. Power Supply Test Points

x. Disconnect the oscillator from the order wire input jack. The buzzer should stop sounding.

y. Using the 9/16-inch wrench, loosen the locknut on the TEL SET REC LEV ADJ control.

NOTE

The following step must be made while listening to speech at normal conversation level. Therefore, for test purposes communication must be established with a remote station. (See para 3-9.)

z. Using the screwdriver, rotate the TEL SET REC LEV ADJ control for a comfortable listening level.

aa. Tighten the locknut on the TEL SET REC LEV ADJ control.

5-24. 20-CYCLE SIGNAL GENERATOR ALIGNMENT.

NOTE

This alignment is to be performed only if the 20-cycle signal generator is in use as an extension ringing voltage source.

5-25. To align the 20-cycle signal generator refer to figure 5-5 and proceed as follows:

a. Connect the oscilloscope to the 90 VAC test points. The oscilloscope should show a waveform with a peak-to-peak amplitude of between 229 volts and 280 volts. If it does not, perform steps b through g. If a proper indication is obtained, proceed with step h.

b. Remove ac power plug.

c. Remove the four power supply mounting screws.

d. Remove the power supply from the rack taking care not to damage rear wiring.

e. Remove the power supply top cover.

WARNING

Hazardous voltages exist in the power supply. Use extreme caution when making adjustments.

f. Return ac power plug.

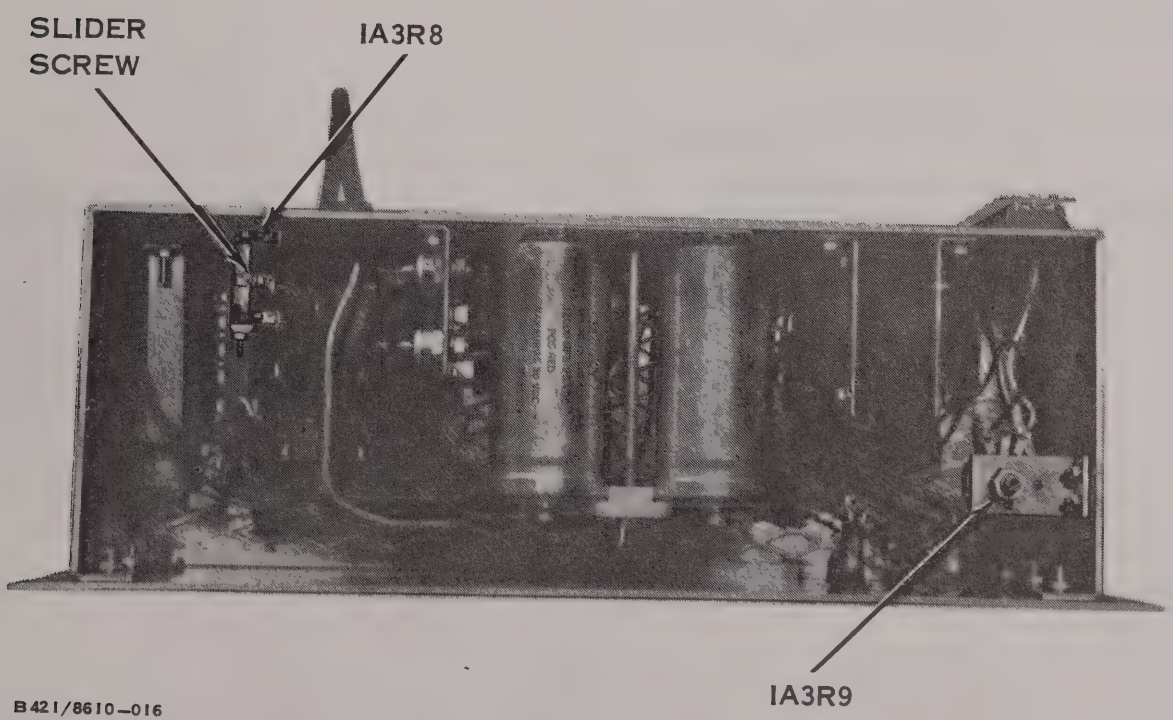


Figure 5-5. Power Supply Internal Adjustments

g. Adjust variable resistor 1A3R9 until the oscilloscope shows a waveform with a peak-to-peak amplitude of 254.5 volts.

h. The oscilloscope should show a waveform of between 18 and 22 cycles per second. If it does not, perform steps a through f (if not previously performed), loosen slider screw and adjust resistor 1A3R8 until a waveform of 20 cycles per second is shown on the oscilloscope. Tighten slider screw.

i. Replace the top cover and return the power supply to the rack (if previously removed).

CHAPTER 6
CIRCUIT DIAGRAMS

-1. PURPOSE. This chapter illustrates by chematic diagrams all component circuits of e order wire telephone set. Each circuit dia- ram is designed to give you a better under- anding of the equipment and to help in trouble- ooting and maintaining the equipment. For stallation, operating, or maintenance infor- ation you should refer to Chapters 1 through 5 this manual.

2. SCOPE. This chapter provides the sche- atic diagrams for each of the components of e order wire telephone set. All input and out- t connectors and terminal strips contain suffi- ent information to enable you to determine the urce and destination of each input and output. lso included are parts location diagrams eyed to appendixes A and C.

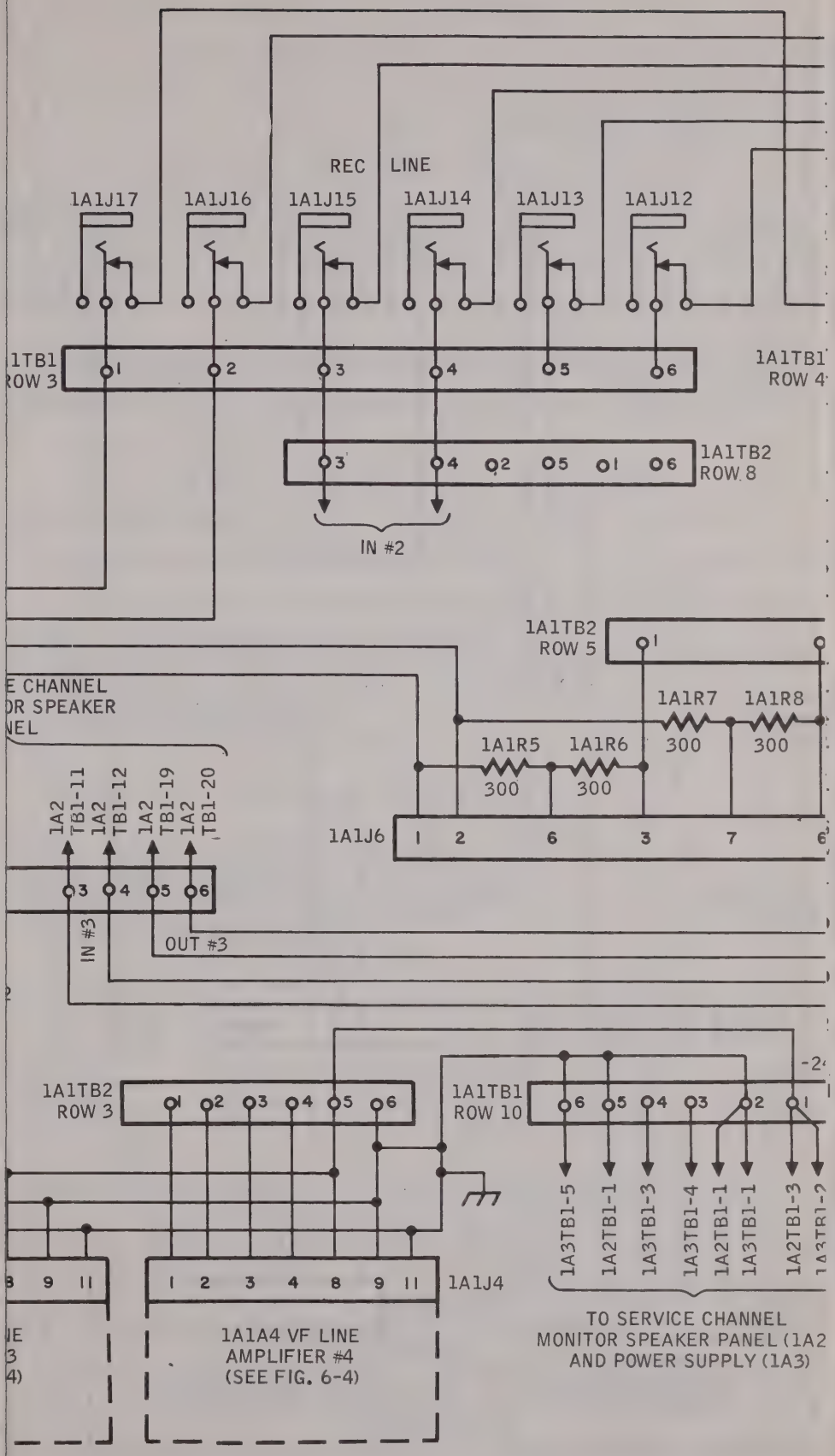
. ARRANGEMENT. The schematic diagrams in this chapter are arranged in the following order: Service Channel and Monitor Speaker Panel; Control Unit, Configuration I; Control Unit, Configuration II; Control Unit, Configuration III; Vf Line Amplifier; Power Supply.

6-4. Schematic diagrams are provided for each configuration of the control unit. Configuration I is used in conjunction with one remote order telephone set and two local order wire telephone sets. Configuration II is used in conjunction with one remote and one local order wire telephone set. Configuration III is used in conjunction with one remote and no local order wire telephone sets. If in doubt as to which configuration you are working with, refer to the applicable site plan.

6-5. CIRCUIT DIAGRAM REFERENCE DATA. All graphic electrical and electronic symbols are in accordance with MIL-STD-15.

6-6. All abbreviations used in this chapter are in accordance with MIL-STD-12.

6-7. All component values are indicated in ohms and microfarads unless otherwise specified.


REC LINE
1A1J17
1A1J16
1A1J15
1A1J14
1A1J13
1A1J12
1TB1
ROW 3
1A1TB1
ROW 4
1A1TB2
ROW 8
IN #2
1A1TB2
ROW 5
1A1R7
1A1R8
300
300
1A1R5
1A1R6
300
300
1A1J6
1A2 TB1-11
1A2 TB1-12
1A2 TB1-19
1A2 TB1-20
IN #3
OUT #3
1A1TB2
ROW 3
1A1TB1
ROW 10
1A1J4
1A1A4 VF LINE
AMPLIFIER #4
(SEE FIG. 6-4)
1A3TB1-5
1A2TB1-1
1A3TB1-3
1A3TB1-4
1A2TB1-1
1A3TB1-1
1A2TB1-3
TO SERVICE CHANNEL
MONITOR SPEAKER PANEL (1A2
AND POWER SUPPLY (1A3)

6-3

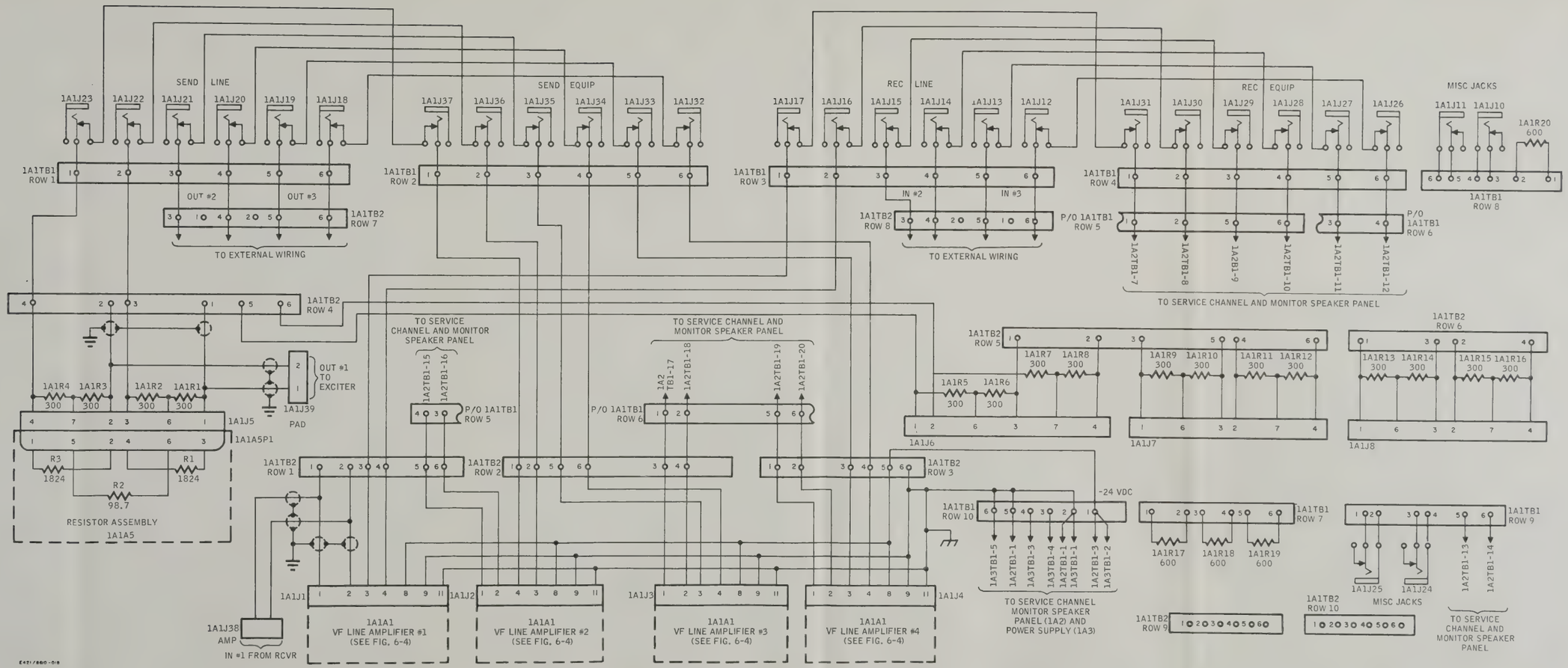


Figure 6-1. Control Unit Configuration I, Schematic Diagram

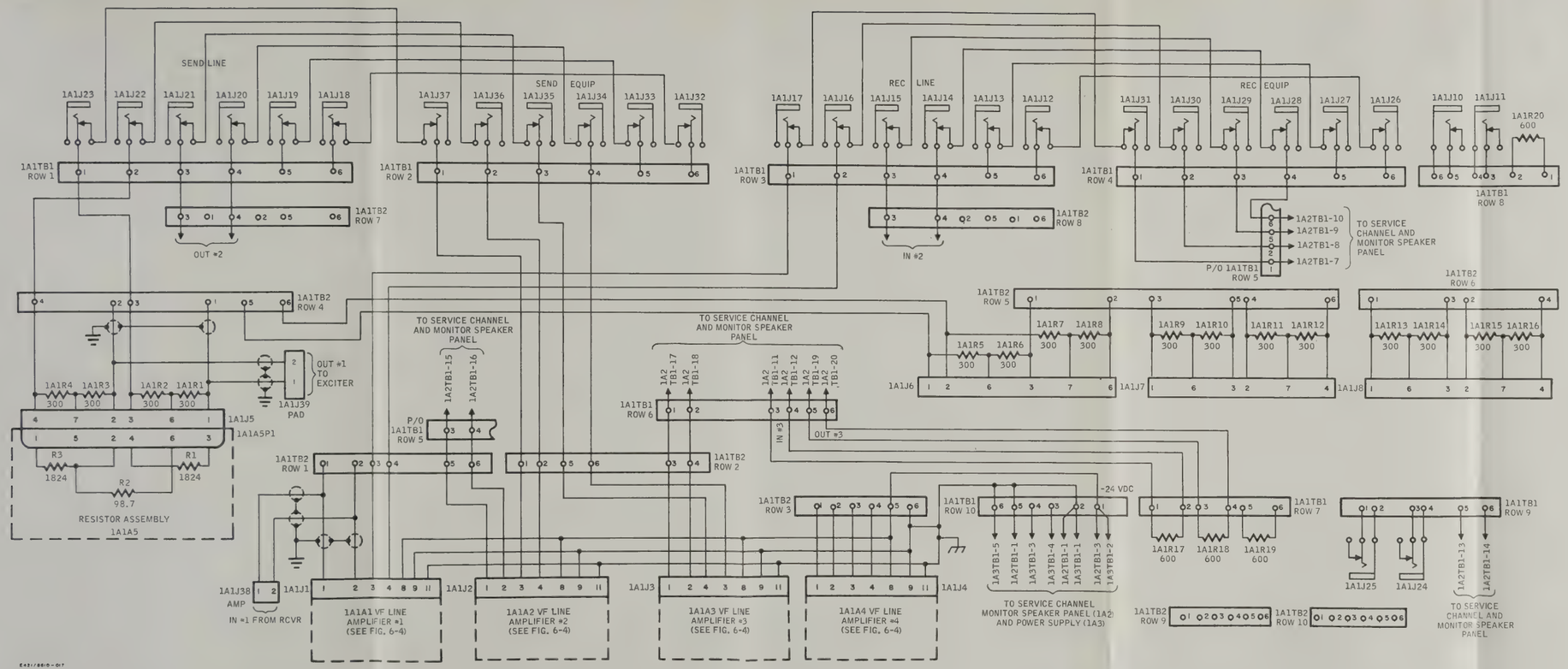
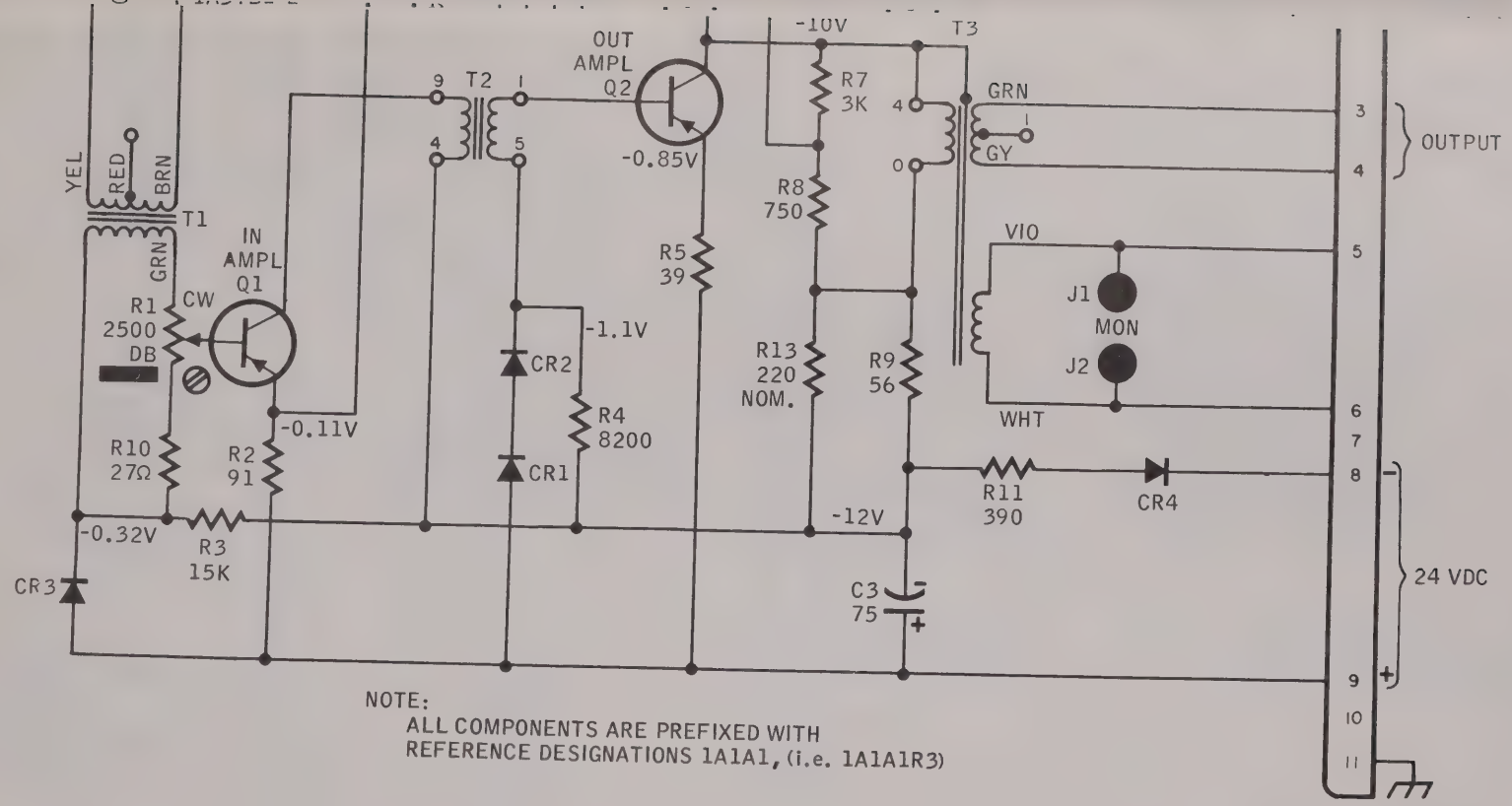
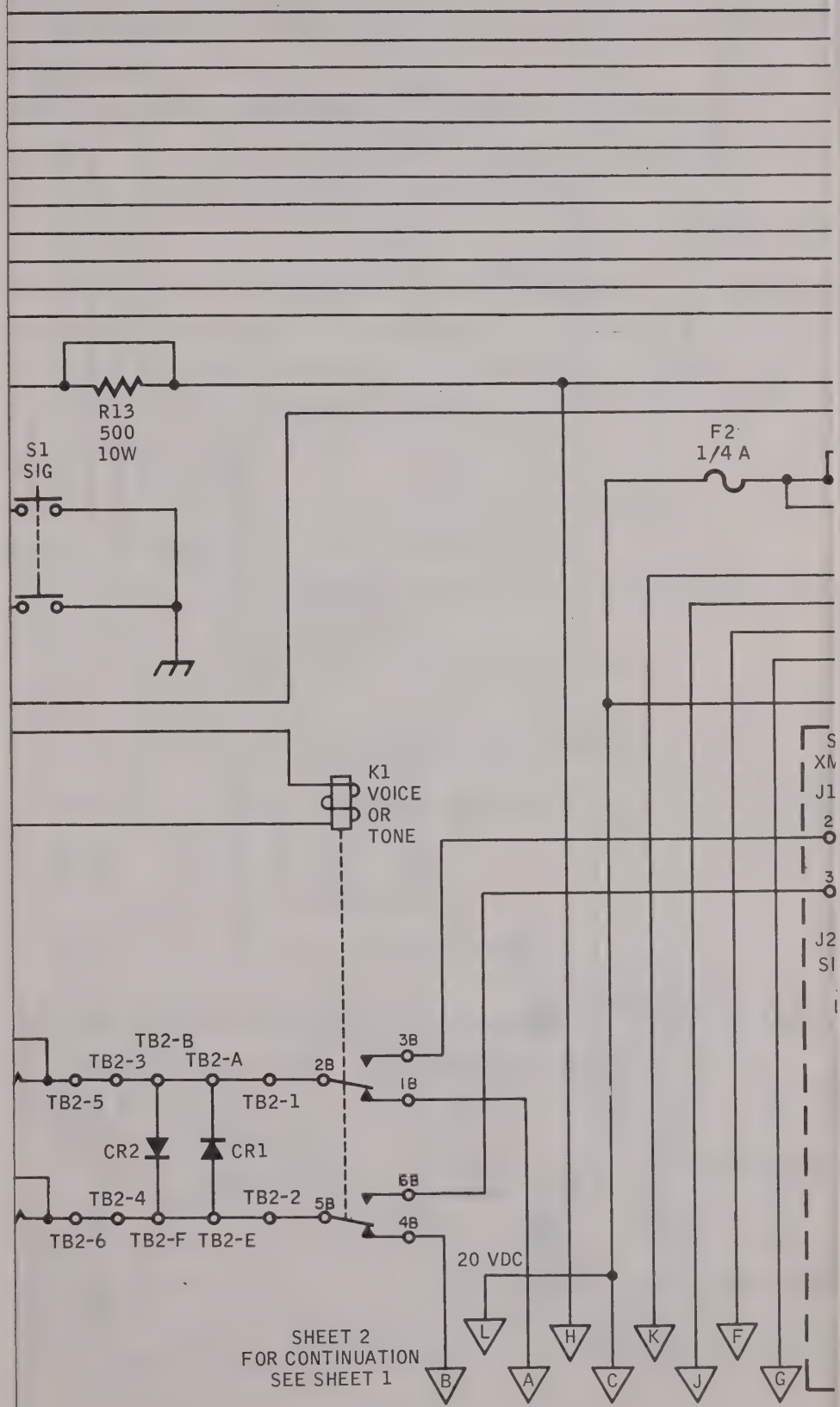


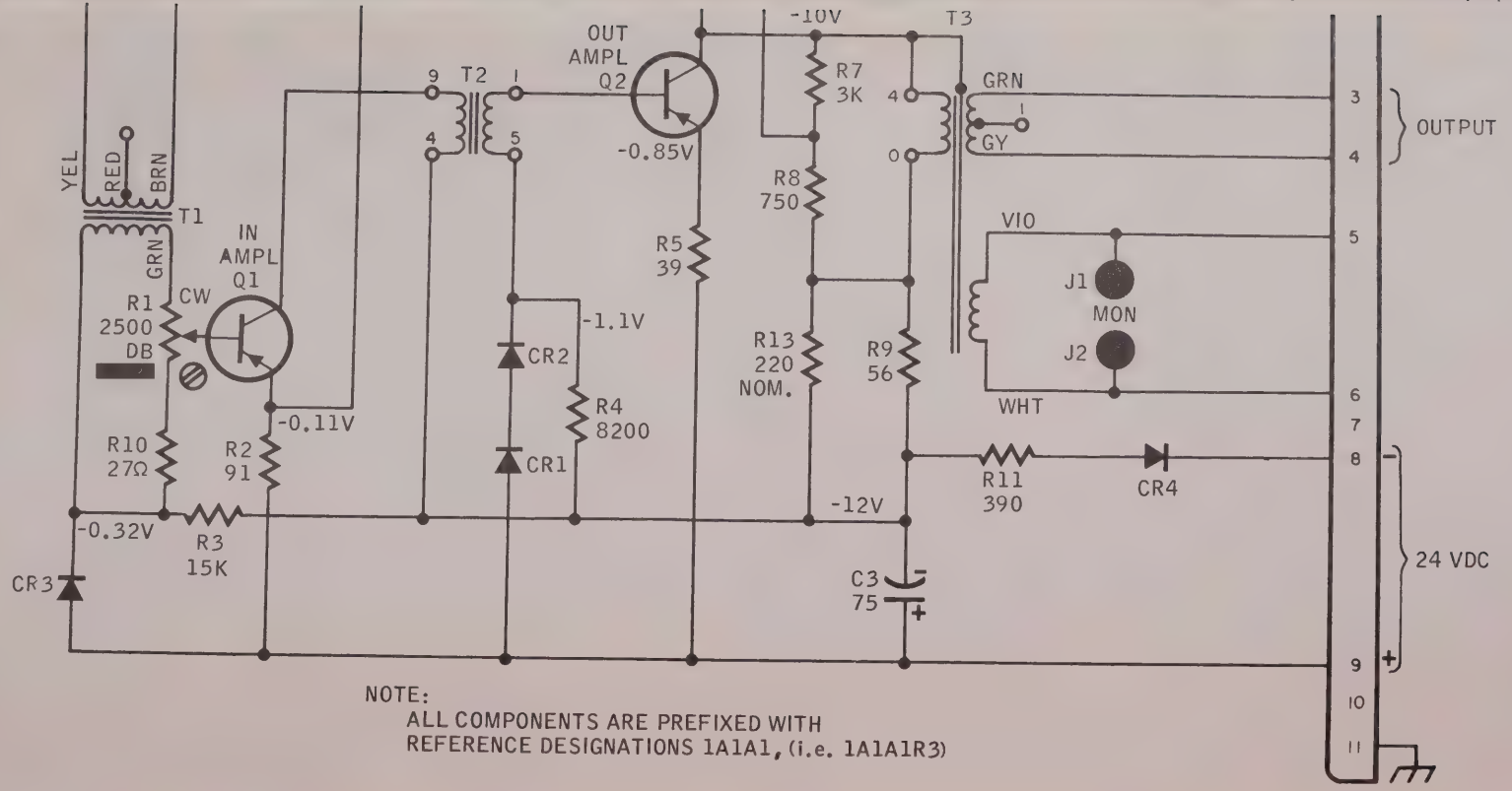
Figure 6-2. Control Unit Configuration II, Schematic Diagram



8421/8610-005

Figure 6-4. VF Line Amplifier, Schematic Diagram


R13
500
10W
S1
SIG
F2
1/4 A
K1
VOICE
OR
TONE
TB2-B
TB2-3
TB2-A
TB2-5
TB2-1
CR2
CR1
TB2-4
TB2-2
TB2-6
TB2-F
TB2-E
3B
2B
1B
6B
5B
4B
20 VDC
SHEET 2
FOR CONTINUATION
SEE SHEET 1
L
H
K
F
B
A
C
J
G



8421/8610-005

Figure 6-4. VF Line Amplifier, Schematic Diagram

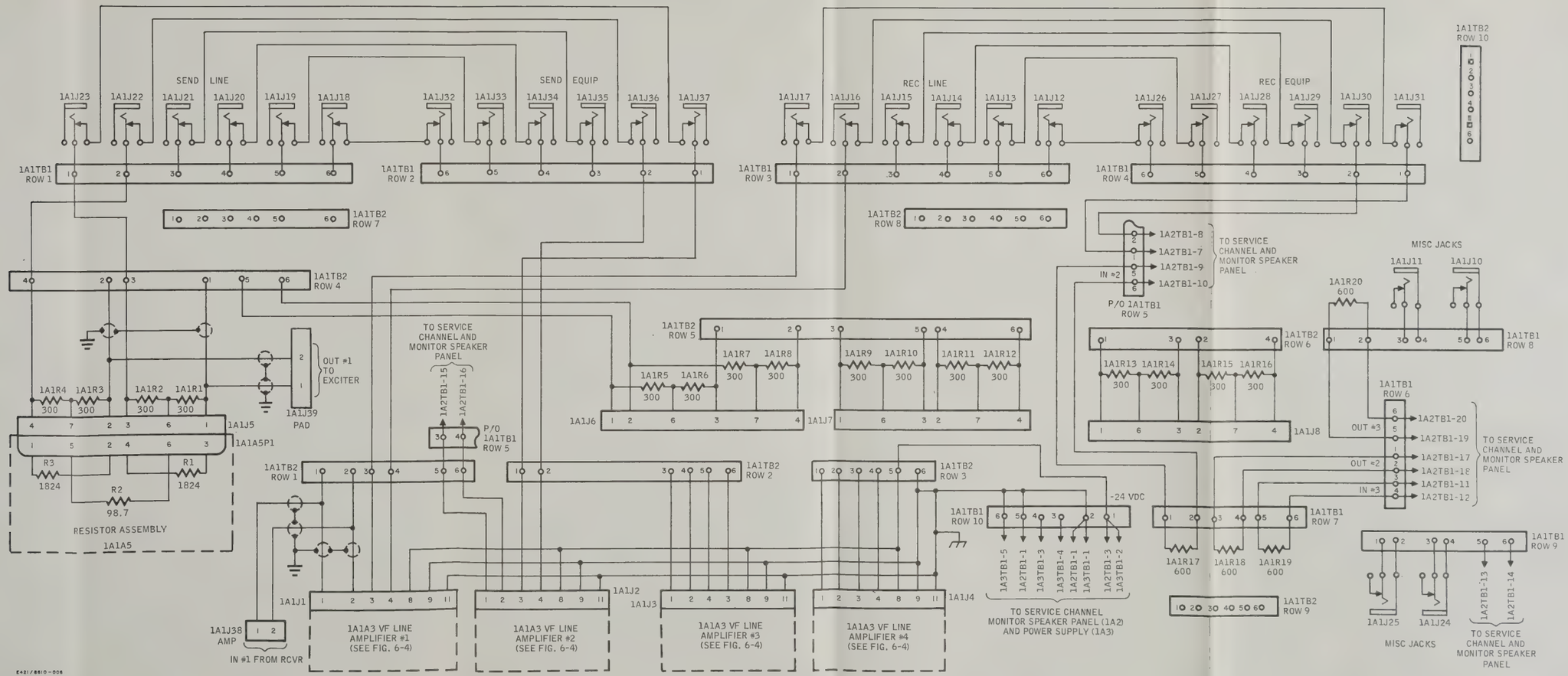


Figure 6-3. Control Unit Configuration III, Schematic Diagram

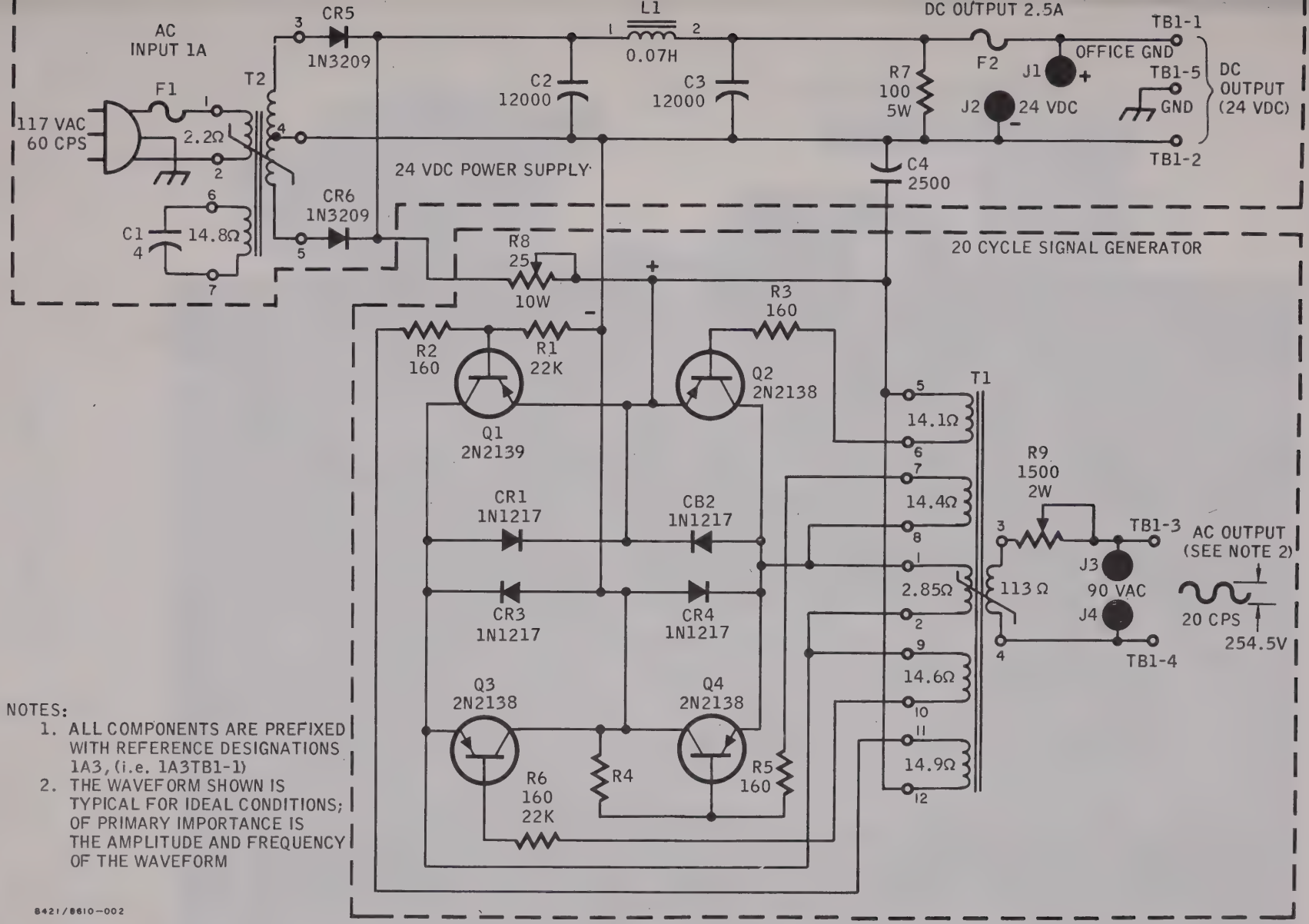


Figure 6-6. Power Supply, Schematic Diagram

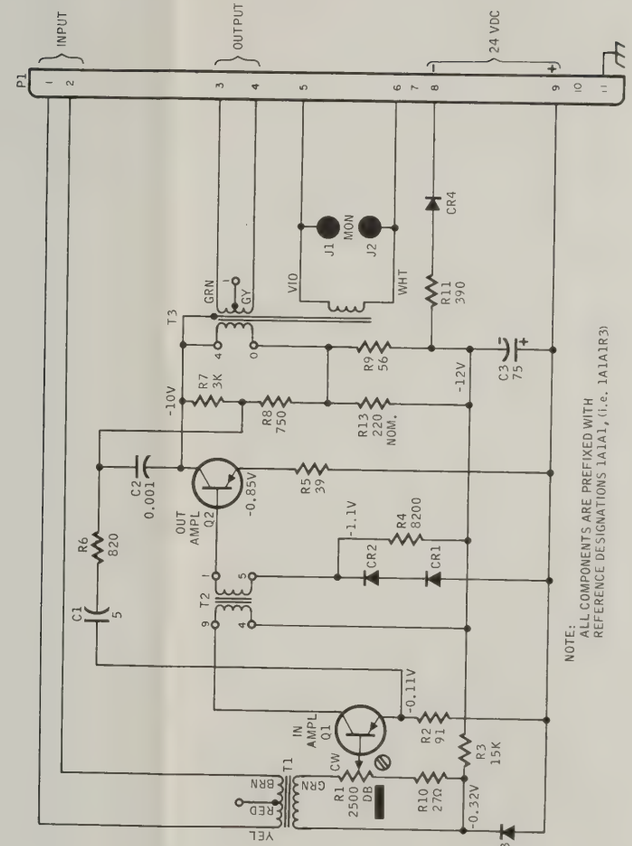


Figure 6-4. VF Line Amplifier, Schematic Diagram

6-5

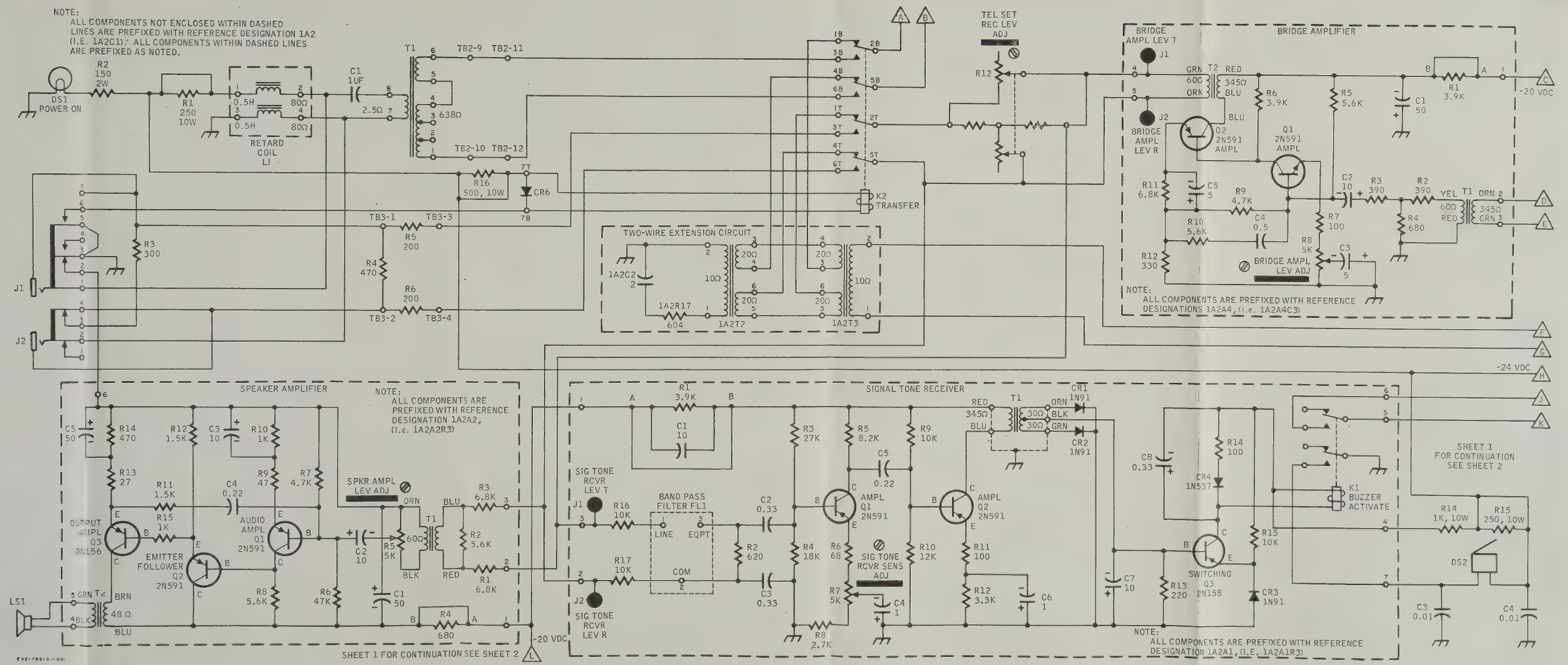


Figure 6-5. Service Channel and Monitor Speaker Panel, Schematic Diagram (Sheet 1 of 2)

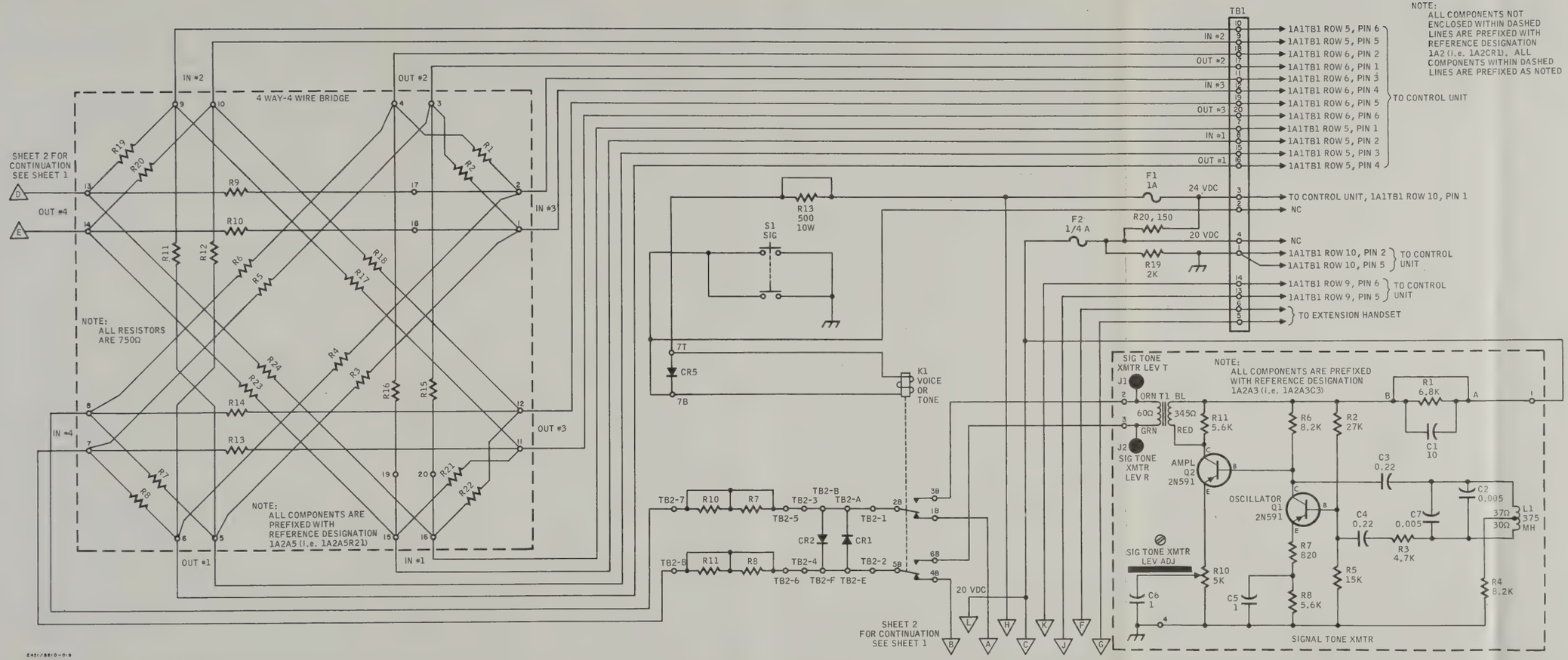


Figure 6-5. Service Channel and Monitor Speaker Panel, Schematic Diagram (Sheet 2 of 2)

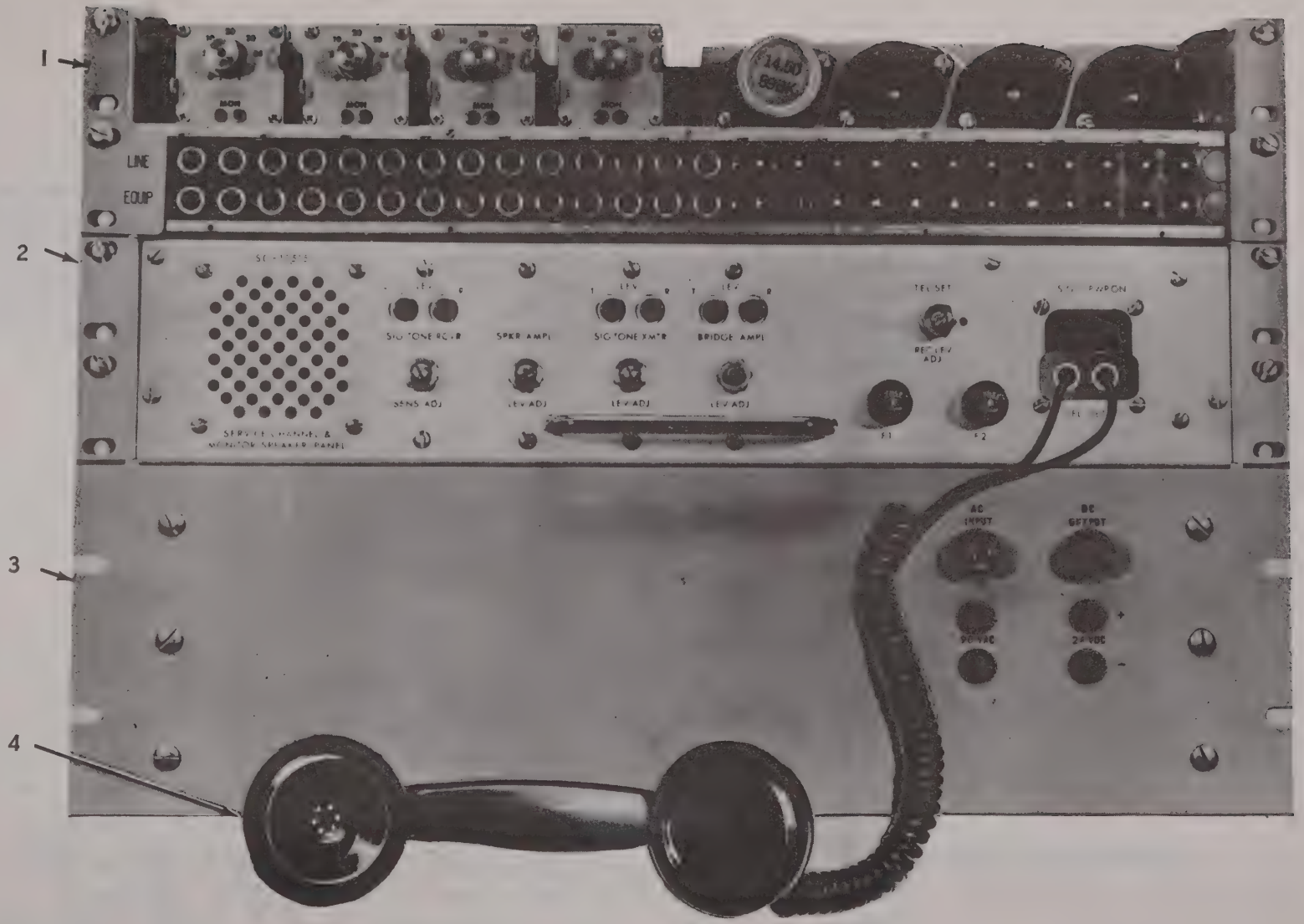


Figure 6—7. Order Wire Telephone Set

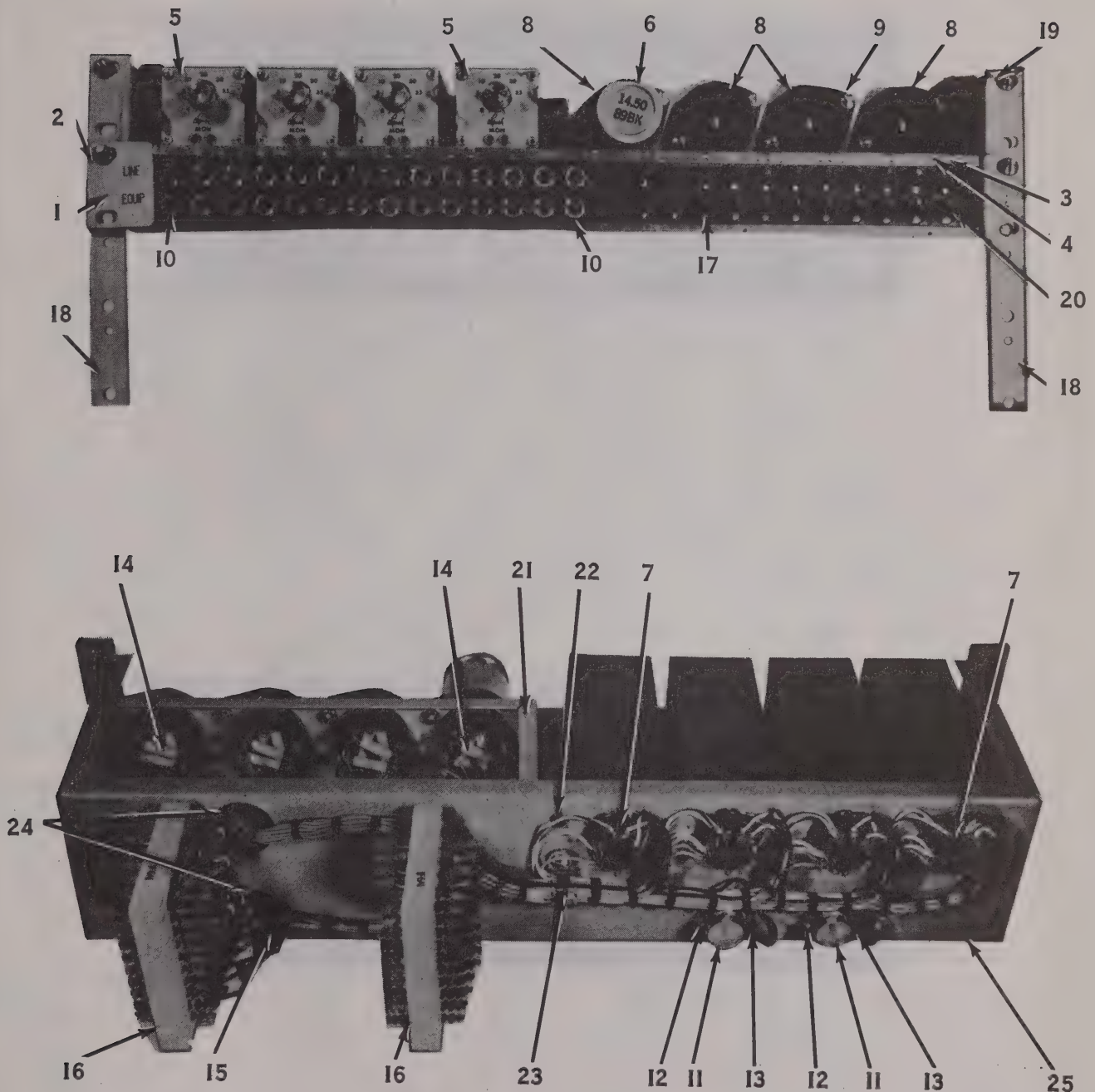


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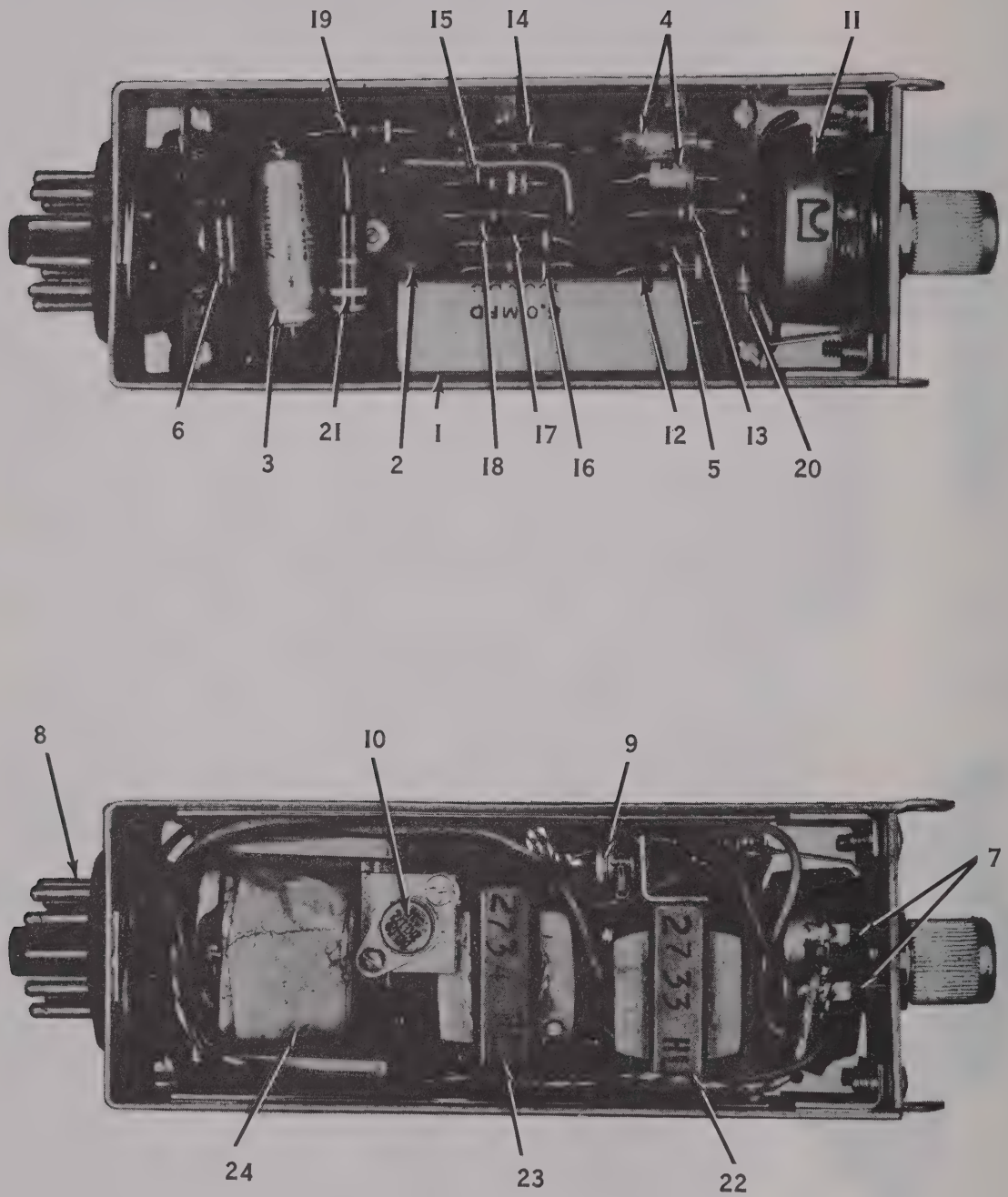
Figure 6—8 Control Unit



B421/8610-103

Figure 6-9 VF Line Amplifier

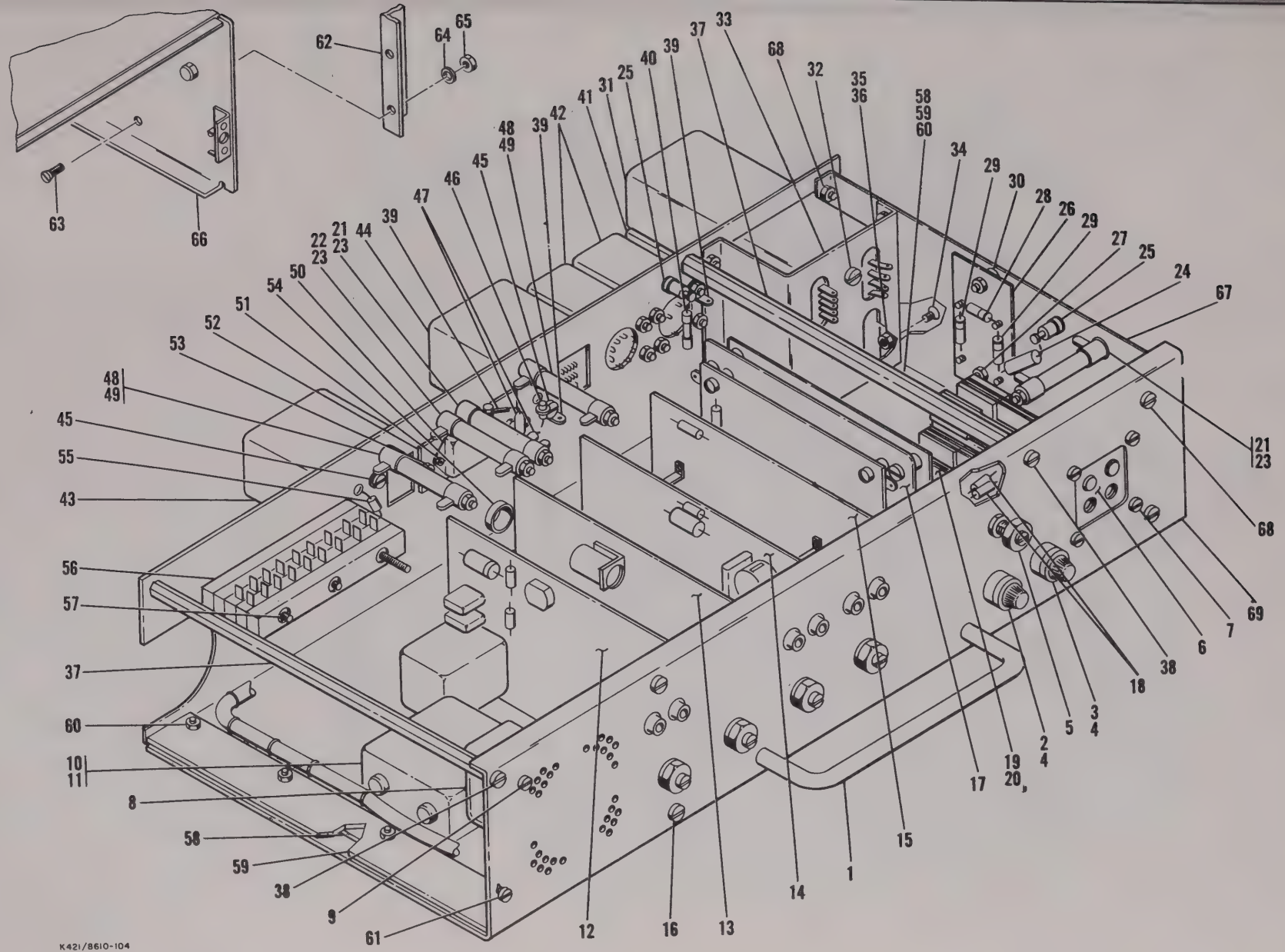
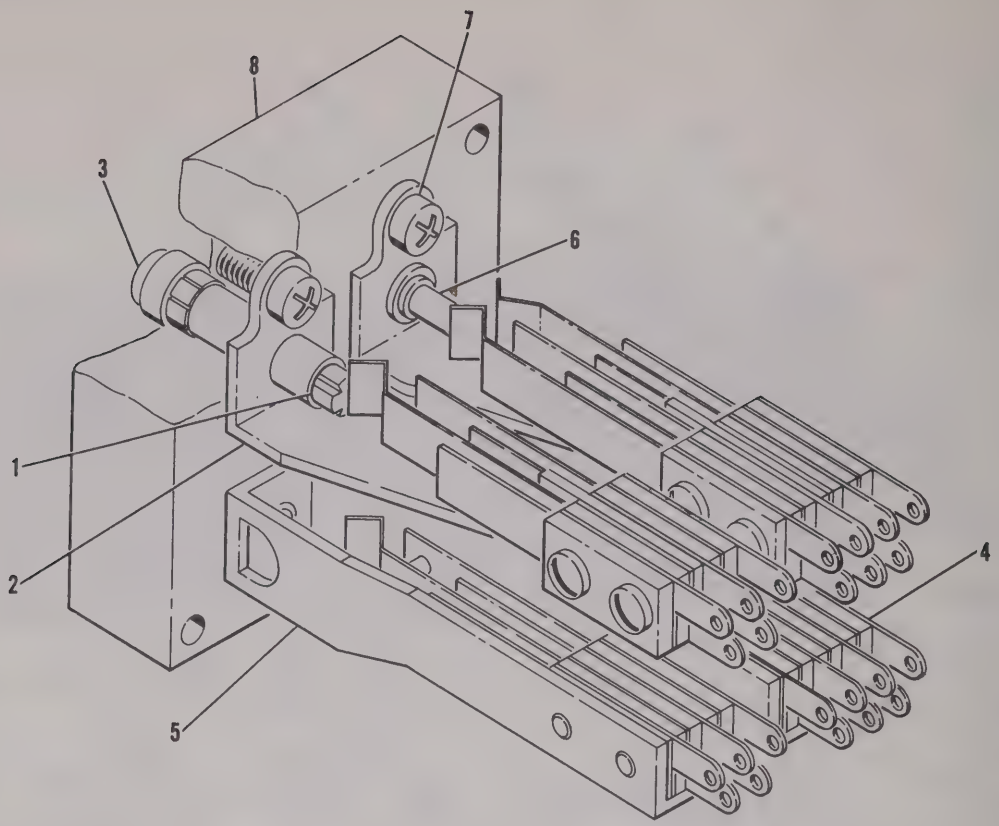


Figure 6-10. Service Channel and Monitor Speaker Panel



J421/8610-105

Figure 6-11. Telephone Jack Assembly

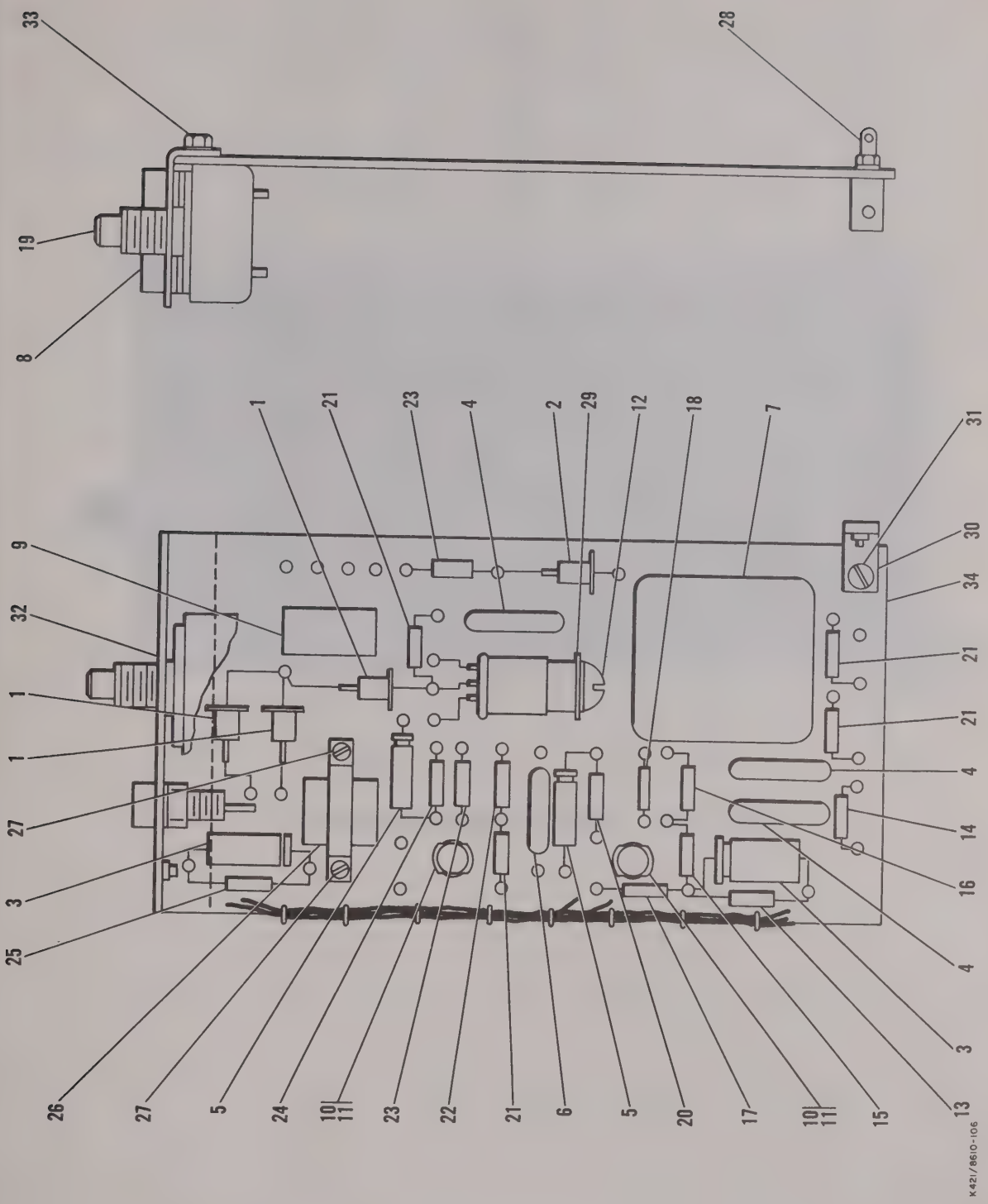


Figure 6-12. Component Board Assembly

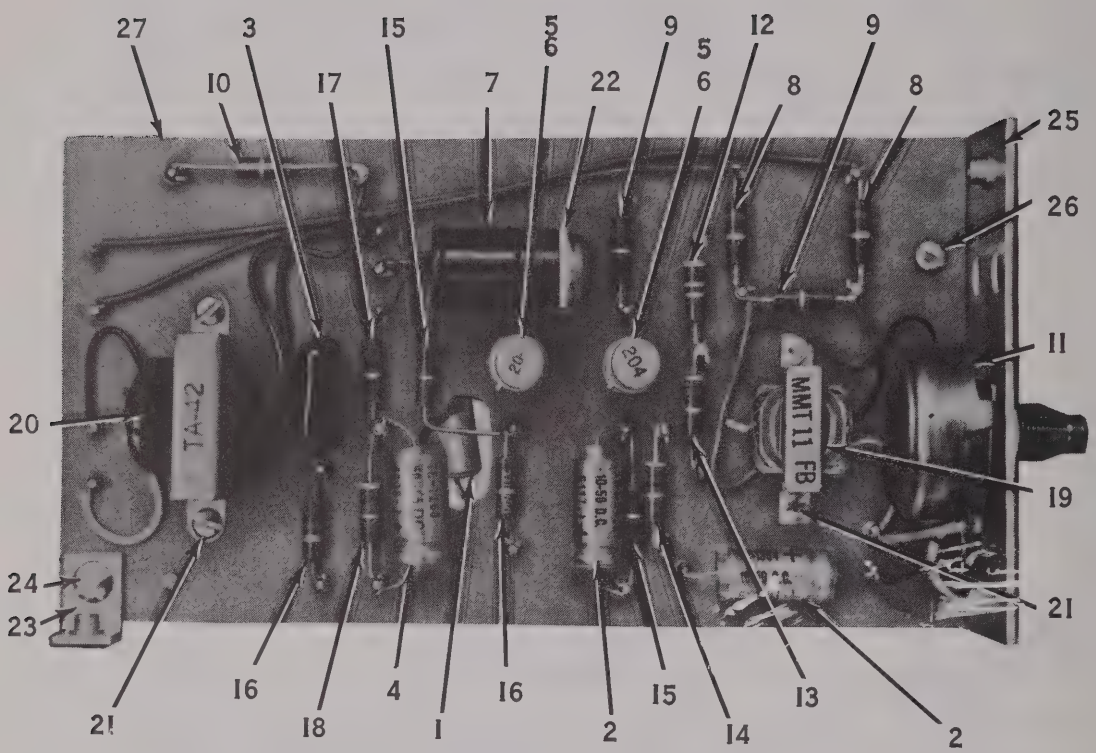


Figure 6—13 Component Board Assembly

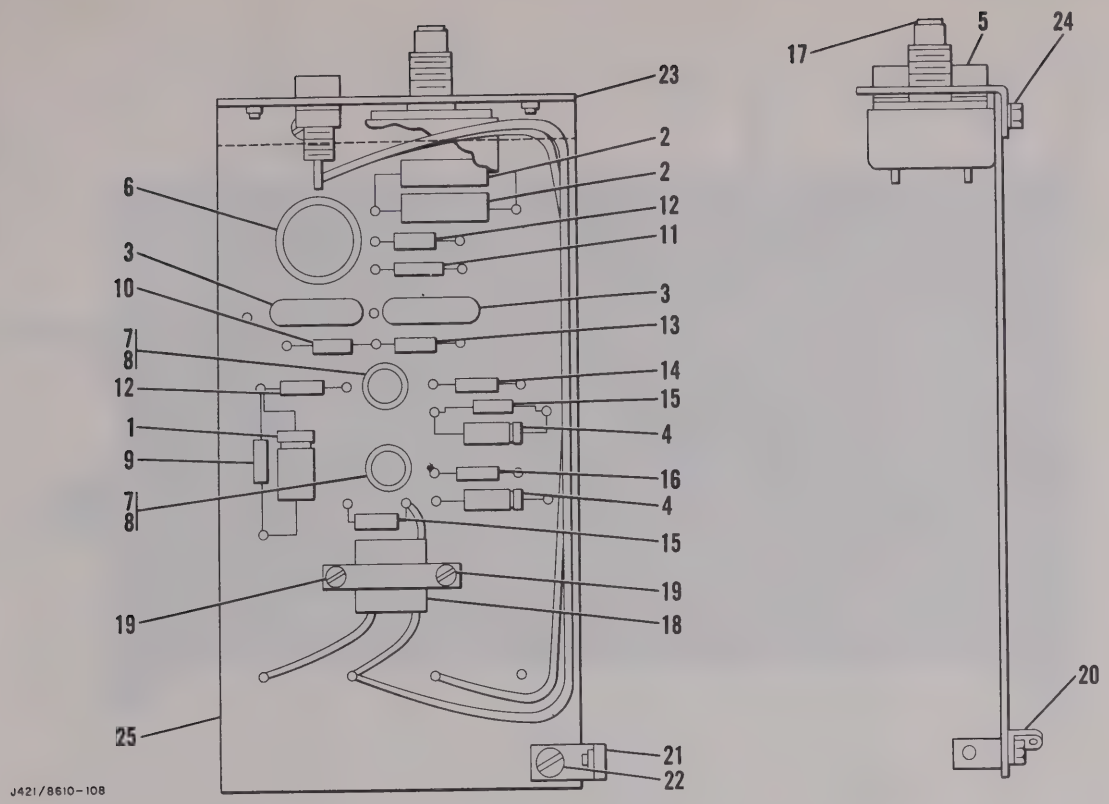


Figure 6-14. Component Board Assembly

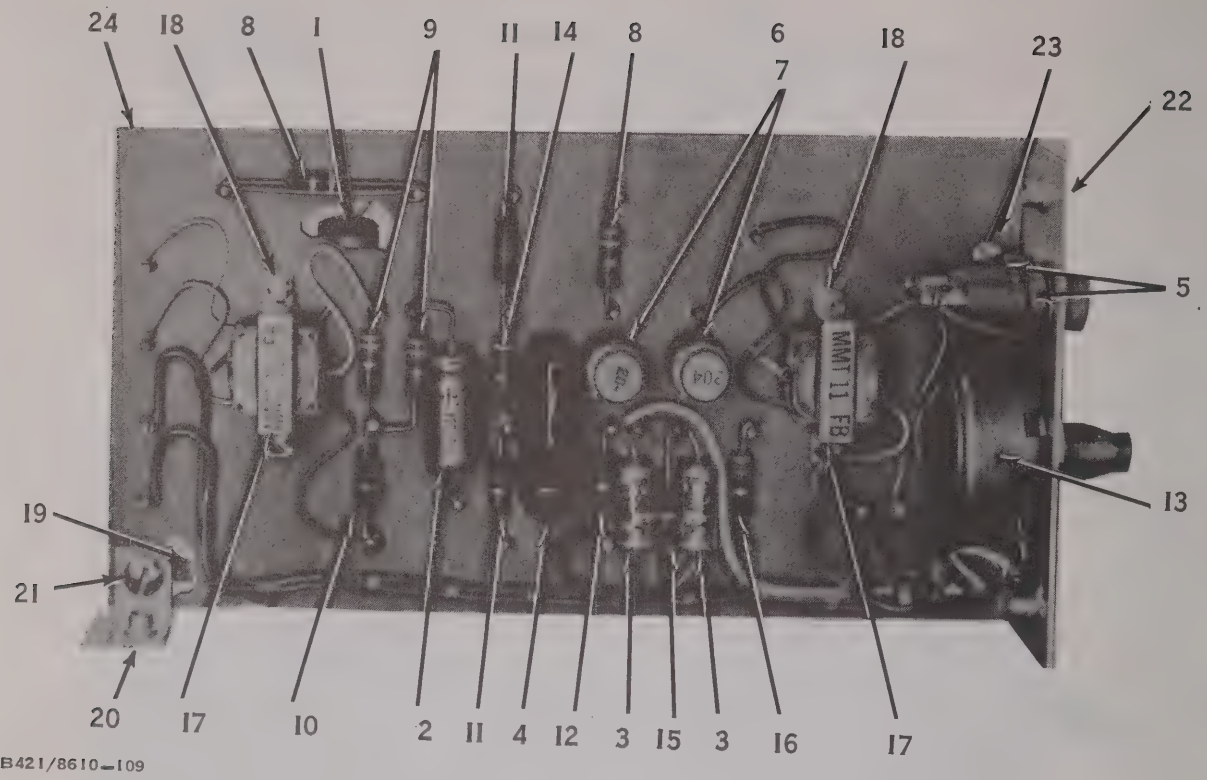
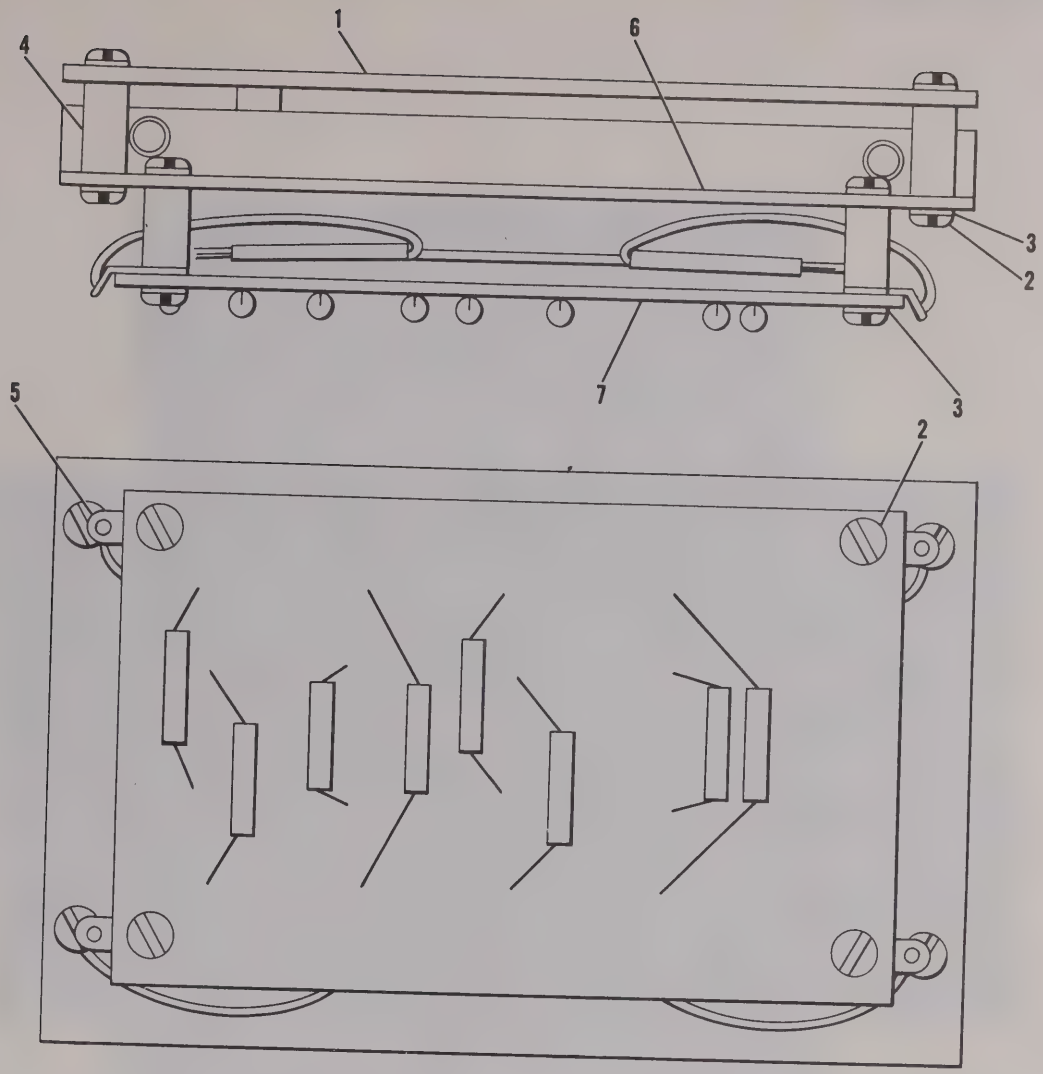


Figure 6—15 . Component Board Assembly



J421/8610-110

Figure 6-16. Component Board Assembly

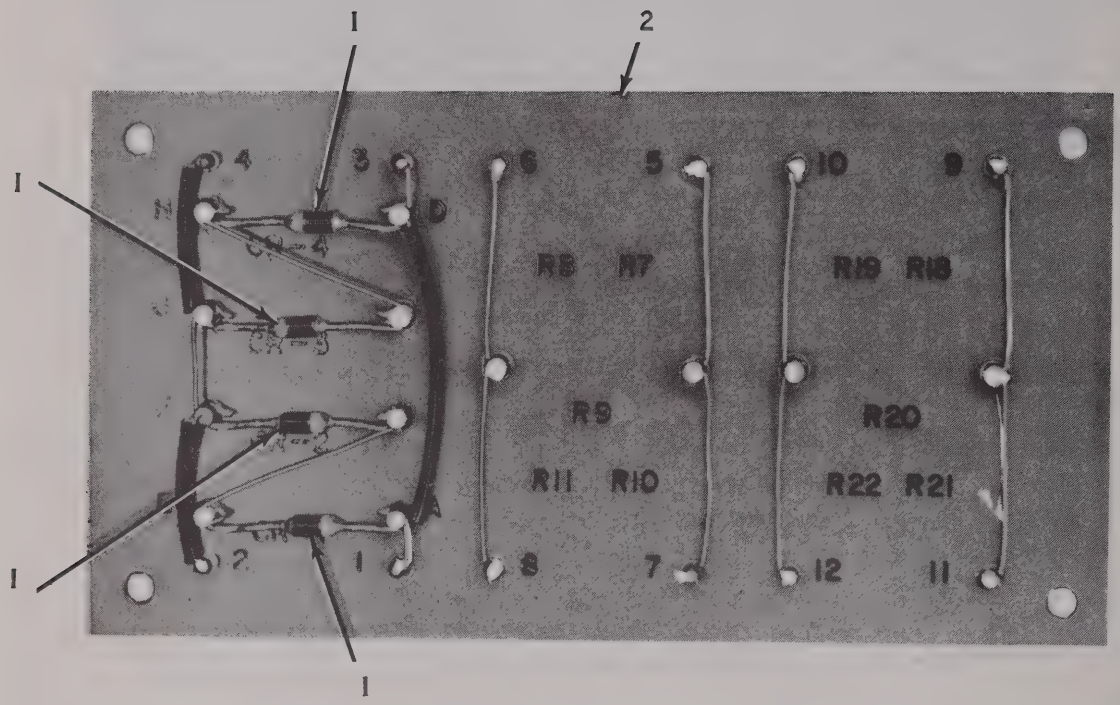


Figure 6—17. Component Board Assembly

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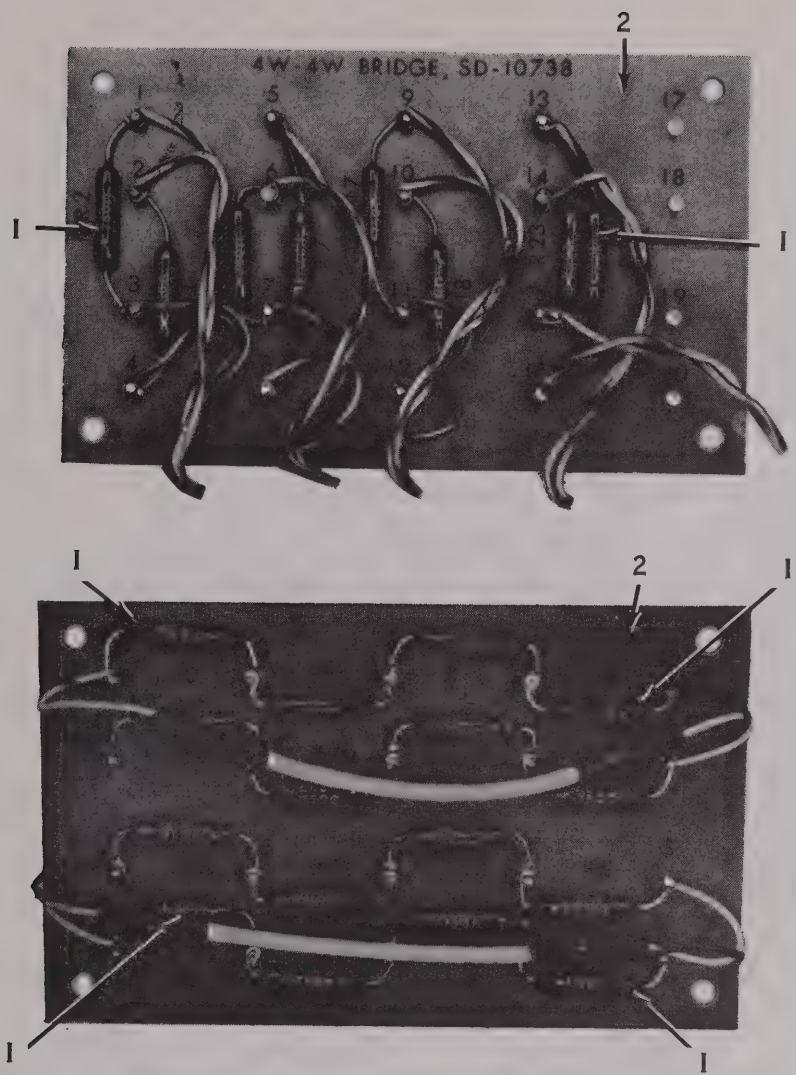


Figure 6—18 Resistor Assembly

B421/8610 — 112

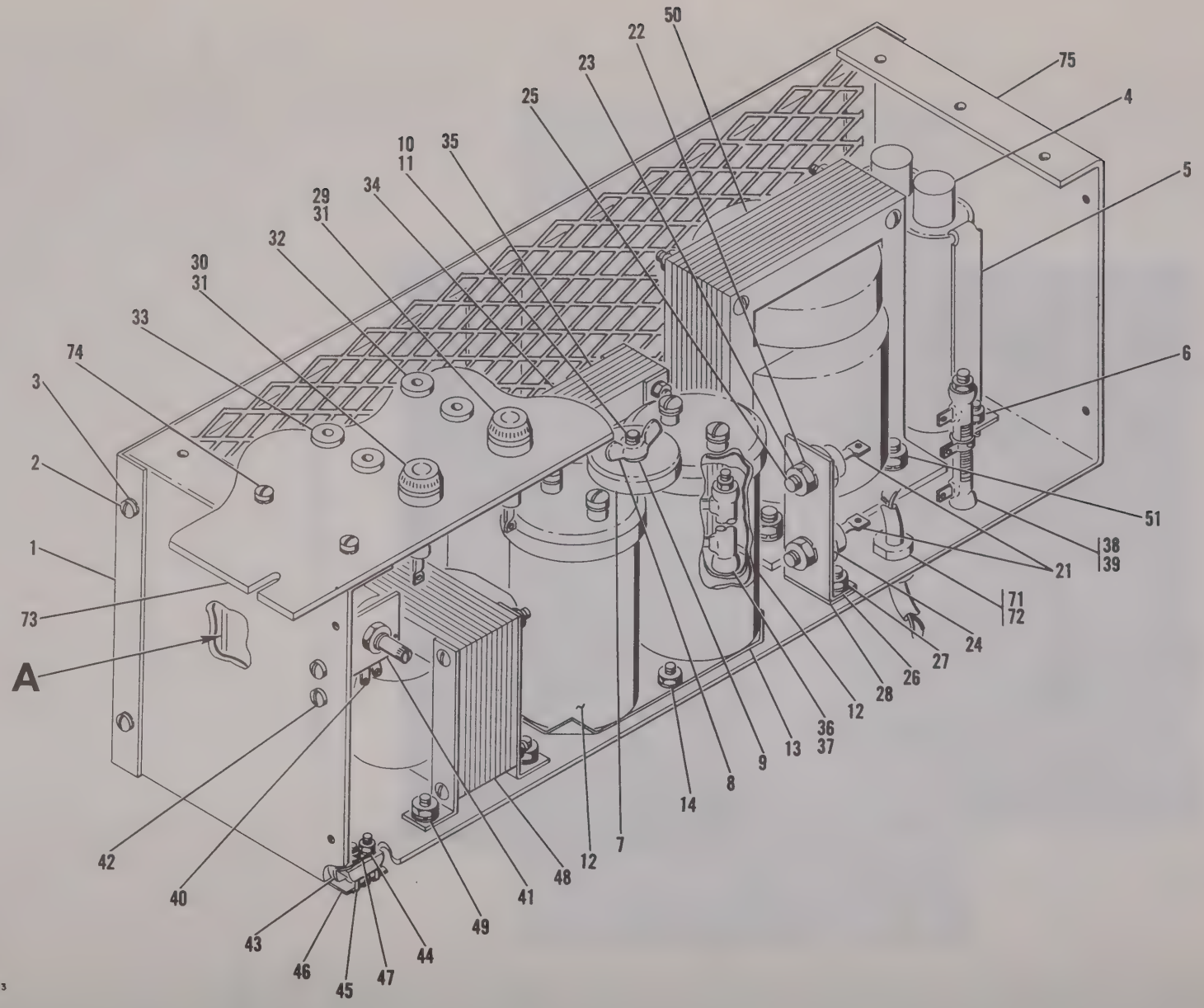
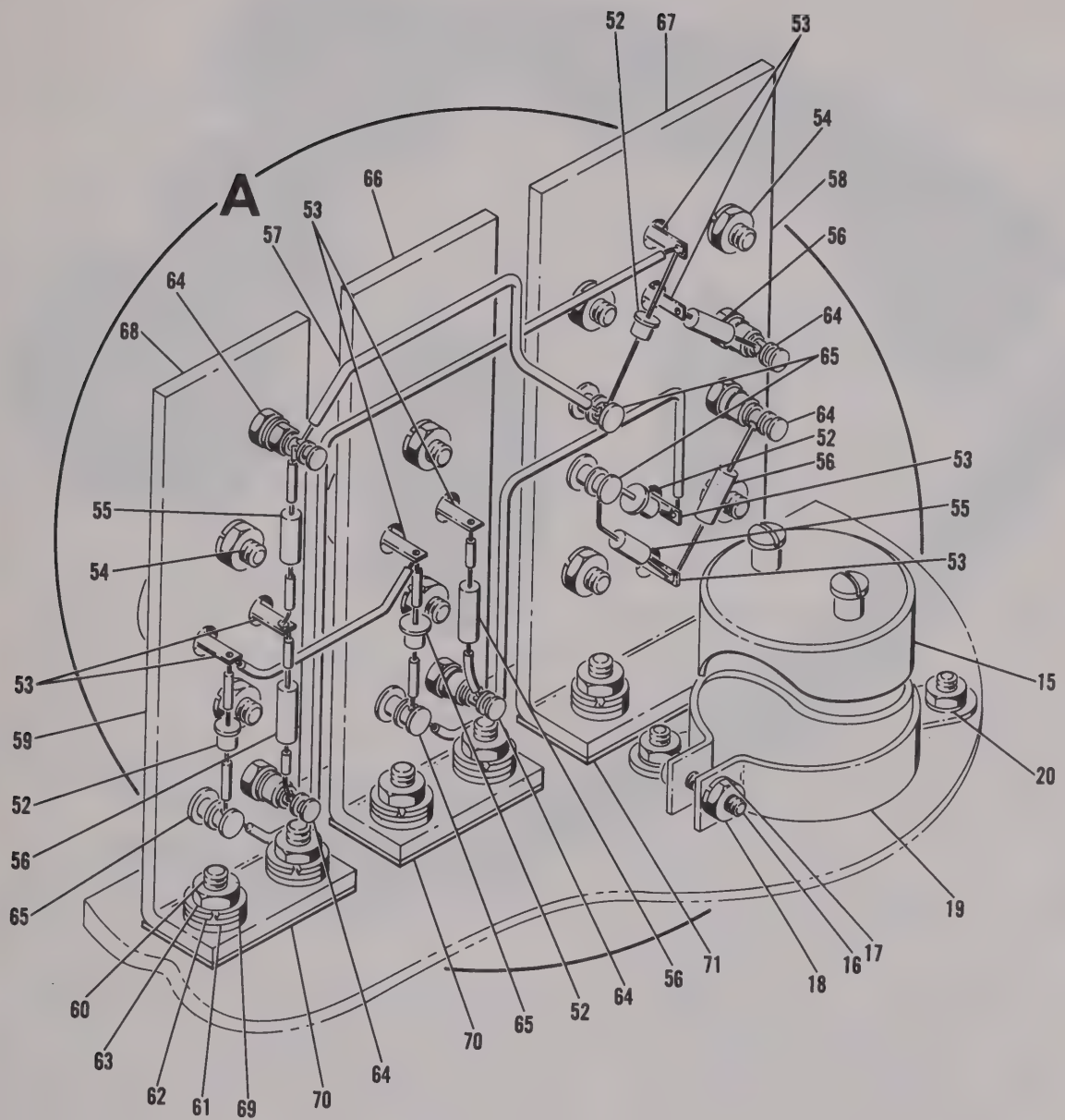


Figure 6-19. Power Supply (Sheet 1 of 2)



21/8610-114

Figure 6-19. Power Supply (Sheet 2 of 2)

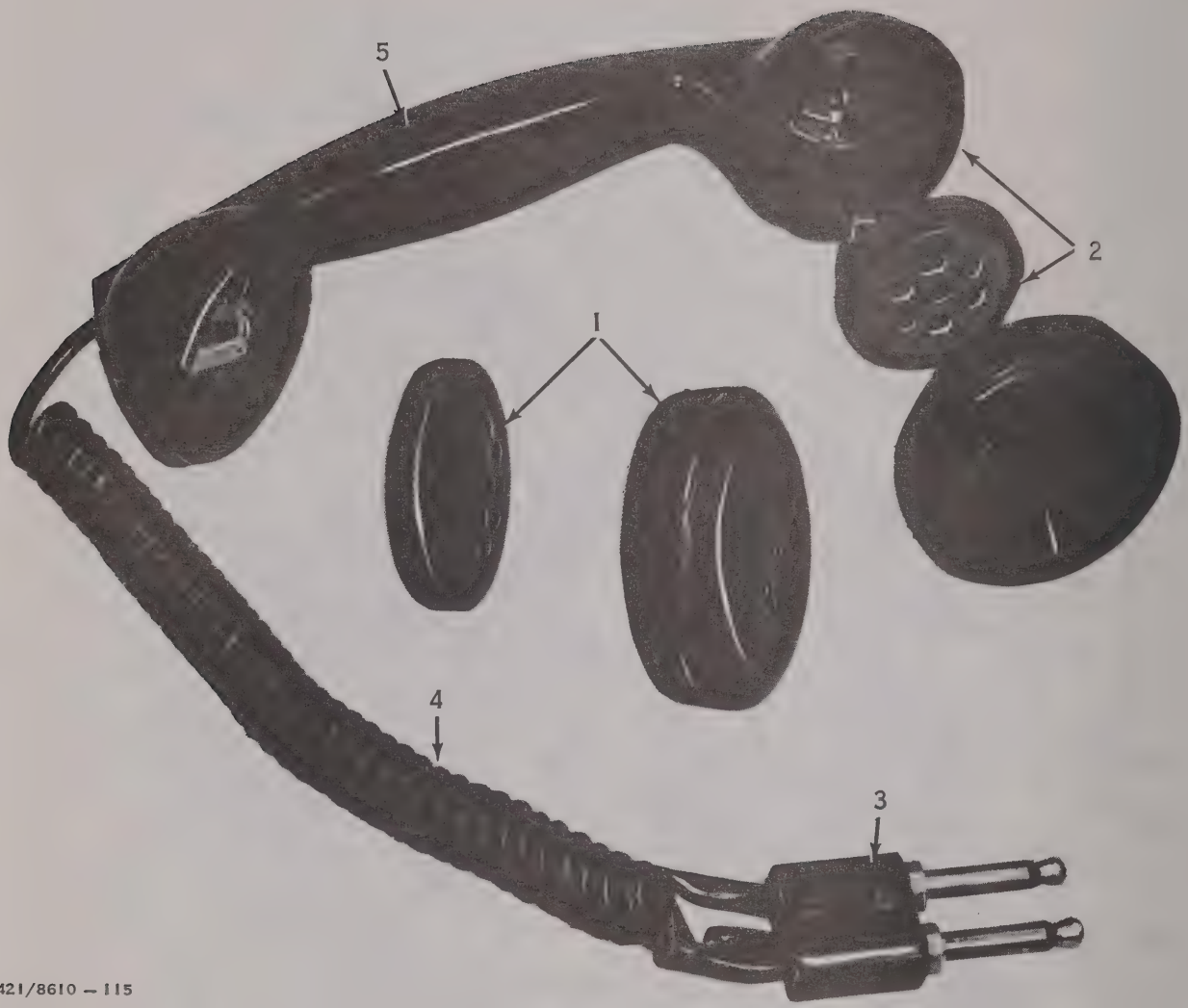


Figure 6—20 Telephone Handset

APPENDIX B

MAINTENANCE ALLOCATION

Section I. INTRODUCTION

B-1. General

This appendix provides a summary of the maintenance operations covered in the equipment literature for Order Wire Telephone Set OS-7006/MRC-85(V)2. It authorizes categores of maintenance for specific maintenance functions on repairable items and components and the tools and equipment required to perform each function. This appendix may be used as an aid in planning maintenance operations. This appendix is current as of 3 December 1968.

B-2. Explanation of Format for Maintenance Allocation Chart

a. Group Number. Group numbers correspond to the reference designation prefix assigned in accordance with ASA Y32.16, Electrical and Electronics Reference Designations. They indicate the relation of listed items to the next higher assembly.

b. Component Assembly Nomenclature. This column lists the item names of component units, assemblies, subassemblies, and modules on which maintenance is authorized.

c. Maintenance Function. This column indicates the maintenance category at which performance of the specific maintenance function is authorized. Authorization to perform a function at any category also includes authorization to perform that function at higher categories. The codes used represent the various maintenance categories as follows:

Code	Maintenance category
C	Operator/Crew
O	Organizational Maintenance
F	Direct Support Maintenance
H	General Support Maintenance
D	Depot Maintenance

d. Tools and Equipment. The numbers appearing in this column refer to specific tools and equipment which are identified by these numbers in section III.

e. Remarks. Self-explanatory.

B-3. Explanation of Format for Tool and Test Equipment Requirements

The columns in the tool and test equipment requirements chart are as follows:

a. Tools and Equipment. The numbers in this column coincide with the numbers used in the tools and equipment column of the MAC. The numbers indicate the applicable tool for the maintenance function.

b. Maintenance Category. The codes in this column indicate the maintenance category normally allocated the facility.

c. Nomenclature. This column lists tools, test, and maintenance equipment required to perform the maintenance functions.

d. Federal Stock Number. This column lists the Federal stock number.

e. Tool Number. Not used.

SECTION II. MAINTENANCE ALLOCATION CHART

MAINTENANCE ALLOCATION CHART

GROUP NUMBER	COMPONENT ASSEMBLY NOMENCLATURE	MAINTENANCE FUNCTIONS											TOOLS AND EQUIPMENT	REMARKS
		INSPECT	TEST	SERVICE	ADJUST	ALIGN	CALIBRATE	INSTALL	REPLACE	REPAIR	OVERHAUL	REBUILD		
1	ORDER WIRE TELEPHONE SET OA-7006/MRC-85(V)2 GB320	C												External
		O											7	Internal
			O										7	Check voltage and resistance
			F										2 thru 9	Check signal level, amplitude and distrotion
					F								2 thru 9	Output and signal level
										O			1,7	Replace fuses, lamps and lens
										F			2 thru 9	Replace defective parts
											H		1 thru 9	Restore to serviceable condition
1A	CONTROL UNIT GB320-1	O											7	Visual
			F										1,2,8,9	Check voltages and continuity and resistance
										F			8,9	Replace defective parts
1B	PANEL, SERVICE CHANNEL AND MONITOR SPEAKER 12131, 10515	O											7	Visual
			F										1,2,8,9	Check voltages, continuity and resistance
										O			1	Replace fuses
										F			8,9	Replace defective parts
1C	POWER SUPPLY 04650 6066477	O											7	Visual
			F										1,2,8,9	Check voltage, continuity and resistance
										O			7	Replace fuses
										F			8,9	Replace defective parts
1D	HAND SET 64959 G1AR-3	O												Visual
			F										1	Check continutiy
										O				Replace elements
										F			8,9	Replace defective parts
1E	AMPLIFIER, VF LINE 99141 GB624	O											7	Visual
			F										8,9	Check voltages, continuity and resistance
										F			8,9	Replace defective parts

TOOL AND TEST EQUIPMENT REQUIREMENTS

TOOLS AND EQUIPMENT	MAINTENANCE CATEGORY	NOMENCLATURE	FEDERAL STOCK NUMBER	TOOL NUMBER
		OA-7006/MRC-85(V)2 (continued)		
1	O	MULTIMETER AN/PSM-6( )	6625-957-4374	
2	F,H	ELECTRONIC VOLTMETER ME-30A/U	6625-643-1670	
3	F,H	OSCILLOSCOPE OS-8	6625-643-1740	
4	F,H	BRIDGING NETWORK HEWLETT-PACKARD 11004A (REPLACES AC60A)	6625-567-5837	
5	F,H	TEST OSCILLATOR HEWLETT-PACKARD 651B	6625-937-4961	
6	F,H	TERMINATING PLUG LENKURT NO. 67OA		
7	O	TOOL KIT, ELECTRONIC EQUIPMENT TK-101/G	5180-064-5178	
8	F,H	TOOL KIT, ELECTRONIC EQUIPMENT TK-100/G	5180-605-0079	
		OR		
9	F,H	TOOL KIT, ELECTRONIC TK-100/G	5180-610-8177	

APPENDIX C

ORGANIZATIONAL, DS, GS, AND DEPOT REPAIR PARTS

Section I. INTRODUCTION

C-1. Scope

This appendix contains a list of repair parts required for the performance of organizational maintenance and a list covering the corresponding requirements for direct support, general support, and depot maintenance for Order Wire Telephone Set OA-7006/MRC-85(V)2. This appendix is current as of 3 December 1968.

Note. No special tools, test, and support equipment are required.

C-2. General

The repair parts list is divided into the following sections:

a. Prescribed Load Allowance (PLA) Section II. The PLA is a consolidated listing of repair parts allocated for initial stockage at the organizational maintenance category. This is a mandatory minimum stockage allowance.

b. Repair Parts for Organizational Maintenance, Section III. Repair parts authorized for organizational maintenance are included in this section.

c. Repair Parts for Direct Support, General Support, and Depot Maintenance, Section IV. Repair parts authorized for direct support, general support, and depot maintenance are included in this section.

Note. All indexes noted below are cross referenced to index numbers. The index numbers appear in ascending sequence in column 3 of the repair parts list (para C-3*a*). The index number for the particular item will be the same for the item in all sections of this appendix.

d. Federal Stock Number Cross-Reference to Index Number, Section V. This is a cross-reference index of Federal stock numbers to index numbers.

e. Figure and Item Number Cross-Reference to Index Number, Section VI. This is a cross-reference index of figure number and item number to index number. The figure numbers are listed in numerical sequence; item numbers are listed for each figure.

C-3. Explanation of Columns

An explanation of the columns is given below.

a. Source, Maintenance, and Recoverability Codes (SMR) Column. This column lists the applicable SMR codes for the part.

(1) *Source code (A).* The selection status and source for the listed item is noted here. Source codes and their explanations are as follows:

Code	Explanation
P	Applies to repair parts that are stocked in or supplied from the GSA/DSA, or Army supply system, and authorized for use at indicated maintenance categories.
M	Applies to repair parts that are not procured or stocked but are to be manufactured at indicated maintenance categories.
A	Applies to assemblies that are not procured or stocked as such but are made up of two or more units, each of which carries an individual stock number and description and is procured and stocked and can be assembled by units at indicated maintenance categories.
X1	Applies to repair parts that are not procured or stocked, the requirement for which will be supplied by use of next higher assembly or component.
X2	Applies to repair parts that are not stocked. The indicated maintenance category requiring such repair parts will attempt to obtain them through cannibalization; if not obtainable through cannibalization, such repair parts will be requisitioned with supporting justification through normal supply channels.
C	Applies to repair parts authorized for local procurement. If not obtainable from local procurement, such repair parts will be requisitioned through normal supply channels with a supporting statement of nonavailability from local procurement.

(2) *Maintenance code (B).* The lowest category of maintenance authorized to install the listed item is noted here.

Code	Explanation
O	Organizational Maintenance
F	Direct Support Maintenance
H	General Support Maintenance

(3) *Recoverability code (C).* The information in this column indicates whether unserviceable items should be returned for recovery or salvage. Recoverability code and its explanation is as follows:

Note. When no code is indicated in the recoverability column, the part will be considered expendable.

Code	Explanation
R	Applies to repair parts and assemblies which are economically repairable at DSU and GSU activities and normally are furnished by supply on an exchange basis.

b. Federal Stock Number Column. The Federal stock number for the item is listed in this column.

c. Description Column. The index number, Federal item name, a five-digit manufacturer's code, an indenture code, and a part number are included in this column. For subsequent appearances of the same item, the manufacturer's code and part number are omitted. The words "same as" followed by the index number assigned to the item when it first appeared in the list will follow the item name, e.g., "RESISTOR, FIXED, COMPOSITION: SAME AS A298." The indenture codes indicate the end item, the assemblies and the component parts. Identical codes are parts of the proceding higher code. An asterisk (*) indicates attaching hardware.

d. Unit of Issue Column. The unit used as a basis of issue (e.g., ea, pr, ft, yd, etc.) is noted in this column.

e. Quantity Incorporated in Unit Pack Column. Not used.

f. Quantity Incorporated in Unit Column. The quantity of repair parts in an assembly is given in this column. Subsequent appearances of the same item in the same assembly are indicated by the letters "REF."

g. Maintenance Allowances Column.

(1) The maintenance allowance columns are divided into subcolumns. Indicated in each subcolumn opposite the first appearance of the item is the total quantity of items authorized for the number of equipments supported. Subsequent appearances of the same item will have no entry in the allowance columns, but will have a reference in the description column to the first appearance of the item. Items authorized for use as required but not for initial stockage, are identified with an asterisk (*) in the allowance column.

(2) The quantitative allowances for organizational category of maintenance represents one initial prescribed load for a 15-day period for the number of equipments supported. Units and organizations authorized additional prescribed loads will multiply the number of prescribed loads authorized by the quantity of repair parts reflected in the appropriate density column to obtain the total quantity of repair parts authorized.

(3) Subsequent changes to organizational allowances will be limited as follows: No change in the range of items is authorized. If additional items are considered necessary, recommendations should be forwarded to Commanding General, U. S. Army Electronics Command, ATTN: AMSEL-ME-NMP-C, Fort Nonmouth, N. J. 07703, for exception or revision to the allowance list. Revisions to the range of items authorized will be made by the USA ECOM National Maintenance Point based upon engineering experience, demand data, or TAERS information.

(4) The quantitative allowances for DS/GS categories of maintenance will represent initial stockage for a 30-day period for the number of equipments supported.

h. One-Year Allowances Per 100 Equipments/ Contingency Planning Purposes Column. Opposite the first appearance of each item, the total quantity required for distribution and contingency planning purposes is indicated. The range of items indicates total quantities of all authorized items required to provide for adequate support of 100 equipments for one year.

i. Depot Maintenance Allowance Per 100 Equipments Column. This column indicates the total quantity of each item authorized depot maintenance for 100 equipments. Subsequent appearances of the same item will have no entry in this column, but will have a reference in the description column to the first appearance of this item.

j. Illustrations Column.

(1) *Figure number (a).* The number of the illustration in which the item is shown is indicated in this column.

(2) *Item or symbol number (b).* The number used to reference the item in the illustration appears in this column.

C-4. Location of Repair Parts

a. This manual contains two cross-reference indexes (sec. V and VI), to be used to locate a repair part when either the Federal stock number, reference number (manufacturer's part number), or figure number is known. The first column in each cross-reference index is prepared, as applicable, in numerical or alphanumerical sequence. The last column of each cross-reference index lists the index number assigned to the part.

b. Refer to the appropriate cross-reference index (para C-2*d*,*e*) and note the index number in

the last column; then refer to the repair parts list to locate the index number which is listed in ascending order in column 3 of the repair parts list.

C-5. Federal Supply Codes

This paragraph lists the Federal supply code with the associated manufacturer's name.

Code	Manufacturer
02660	Amphenel Corp.
04650	Pointer Equipment Co.
05277	Westinghouse Electric Corp., Semi-Conductor Dept.
07065	Line Electric Co.
07109	Oaktron Industries, Inc.
08863	Nylomatic Corp.
11237	Chicago Telephone of California, Inc.
12131	Farinon Electric
14655	Cornell-Dubilier Electric Corp.
27494	Staffall, Inc.
44655	Ohmite Mfg. Co.
58854	Sylvania Electric Products, Inc. Lighting Products Div.
63743	Ward Leonard Electric Co.
64959	Western Electric Co., Inc.
70674	ADC Products, Inc.
71279	Cambridge Thermionic Corp.
71286	Camloc Fastener Corp.
71400	Bussmann Mfg. Div. of Mc Graw-Edison Co.
71482	Clare CP & Co.
71785	Cinch Mfg. Co. and Howard B. Jones Div.
72136	Electric Motive Mfg. Co., Inc.
72138	Engineering Products Co.
72825	Eby Hugh H., Inc.
74970	Johnson E. F. Co.
80131	Electronics Industries Assoc.
80183	Sprague Products Co.
80205	National Aerospace Standards Committes
81349	Military Specifications
81483	International Rectifier Corp.
82389	Switchcraft, Inc.
83330	Herman H. Smith, Inc.
83744	Lenkurt Electronic Co., Inc.
84411	TRW Capacitor Division
88419	Cornell-Dubilier Electric Corp. Electro-Mechanical Div.
90201	Mallary Capacitor Co.
91662	Elco Corp.
96906	Military Standards
97965	Essex Wire Corp., Electronic Marketing Div.
98278	Microdot, Inc.
98509	Relay Sales, Division of Bob Whan and Son Electronics, Inc.
98734	Hewlett-Packard Co. Paeco Div.
99141	Lynch Communication Systems, Inc.
No code	Graybar, Inc.

SECTION II. PRESCRIBED LOAD ALLOWANCE

PRESCRIBED LOAD ALLOWANCE						
(1) FEDERAL STOCK NUMBER	(2) DESCRIPTION	(3) 15-DAY ORG. MAINT. ALLOWANCE				(4) QTY INC IN UN PK
		(A) 1-5	(B) 6-20	(C) 21-50	(D) 51-100	
	G03790: FUSE, CARTRIDGE: 71400; MDL2 1/2	2	2	3	6	
	G00700: FUSE: 81349; F02GR250A	2	2	3	6	
5920-131-9816	G03780: FUSE, CARTRIDGE: 71400; MDL1	2	2	3	6	
5920-665-2881	G00690: FUSE: 81349: F02G1R00A	2	2	3	6	
	G01770: LAMP, INCANDESCENT: 58854; 24C	*	*	2	2	

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR ORGANIZATIONAL MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 15 DAY ORG. MAINT. ALW. (A) 1–5	(B) 6–20	(C) 21–50	(D) 51–100	(8) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
A	O	R								G00010: ORDER WIRE TELEPHONE SET OA-7006/MRC-85(V)2; Graybar Inc GB320 (This item is nonexpendable)									
P	O		5920-665-2881							G00690: FUSE: 81349; F02G1R00A	ea		1	2	2	3	6	6-10	2
P	O									G00700: FUSE: 81349; F02GR250A	ea		1	2	2	3	6	6-10	3
P	O									G01770: LAMP, INCANDESCENT: 58854; 24C	ea		1	*	*	2	2	6-11	1
P	O									G01790: LENS, INDICATOR LIGHT: 64959; 2L	ea		1	*	*	*	*	6-11	3
P	O		5920-131-9816							G03780: FUSE, CARTRIDGE: 71400; MDL1	ea		1	2	2	3	6	6-19	29
P	O									G03790: FUSE, CARTRIDGE: 71400; MDL2 1/2	ea		1	2	2	3	6	6-19	30

(1) SOURCE CD (A)	MAINT. CD (B)	REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
A	F	R								A	G00010 ORDER WIRE TELEPHONE SET OA-7006/MRC-85(V)2: Graybar Inc GB320 (This item is nonexpendable)			1									6-7	
A	F	R								B	G00020 CONTROL UNIT, AAAAA GB320-1			1									6-7	1
A	F	R								B	G00030 PANEL, SERVICE CHANNEL AND MONITOR SPEAKER SEE FIG. 4 12131 10515			1									6-7	2
A	F	R								B	G00040 POWER SUPPLY. PEC2744 04650 6066477			1									6-7	3
A	F	R								B	G00050 HANDSET SEE 64959 G1AR-3			1									6-7	4
A	F	R								B	G00060 CONTROL UNIT SAME AS G00020			REF									6-8	
M	H									C	G00070 PLATE, IDENTIFICATION 99141 B2035			1									6-8	1
C	F									*	G00080 SCREW 96906 MS35226-59			8									6-8	2
C	F									C	G00090 PLATE, DESIGNATION 99141 COML			1									6-8	3

REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(10) ILLUSTRATION (B) ITEM OR SYMBOL NUMBER
C	F									*	G00100 SCREW 96906 MS35241-10			5									6-8	4
A	F	R								C	G00110 AMPLIFIER, VF LINE 99141 GB624			4									6-8	5
P	F									C	G00120 RESISTOR ASSEMBLY 64959 89BR-17DB			1	*	*	*	*	*	*	4	1	6-8	6
P	F		5935-549-5424							C	G00130 CONNECTOR, RECEPTACLE, ELECTRICAL 02660 78S11			4	*	*	2	*	*	2	10	4	6-8	7
P	F									C	G00140 CONNECTOR, RECEPTACLE, ELECTRICAL 64959 F6A			4	*	*	2	*	*	2	10	4	6-8	8
C	F		5305-043-6665							*	G00150 SCREW 96906 MS35225-30			17									6-8	9
C	F		5310-186-7410							*	G00160 WASHER 96906 MS15795-206			13									6-8	
C	F		5310-013-4530							*	G00170 NUT 96906 MS35649-62			30									6-8	
P	F		5935-243-8158							C	G00180 JACK, TELEPHONE 64959 218A			28	2	2	3	2	2	2	46	28	6-8	10
C	F		5305-043-6663							*	G00190 SCREW 96906 MS35225-28			28										

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(10) ILLUSTRATION (B) ITEM OR SYMBOL NUMBER
P	F		5935-665-4573							C	G00200 CONNECTOR 81349 UG422/U			2	*	*	*	*	*	*	5	2	6-8	11
C	F		5305-043-6638							*	G00210 SCREW 96906 MS35225-13			8									6-8	12
C	F		5310-527-3290							*	G00220 WASHER 96906 MS35333-19			8									6-8	
C	F		5310-013-4524							*	G00230 NUT 96906 MS35649-42			8									6-8	
C	F		5940-686-8168							C	G00240 TERMINAL, LUG 96906 MS35430-3			2									6-8	13
P	F		5905-078-6915							C	G00250 RESISTOR 81349 RN7083000F			16	2	3	5	2	2	2	46	32	6-8	14
P	F		5905-968-5141							C	G00260 RESISTOR,FIXED, WIREWOUND,600 OHM,1 WATT 44655 4414			4	*	2	2	*	2	2	16	8	6-8	15
P	F									C	G00270 TERMINAL BOARD 64959 157C			2	*	*	*	*	*	*	5	2	6-8	16
C	F		5305-043-6696							*	G00280 SCREW 96906 MS35225-46			4										
C	F		5310-013-8530							*	G00290 WASHER 96906 MS35333-21			8										

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(10) ILLUSTRATION (B) ITEM OR SYMBOL NUMBER
X2	F									*	G00300 SPACER, SLEEVE, 3/16 ID BY 1/2 OD BY 1/4 IN. LG Graybar Inc D2036-16			4										
X2	F									C	G00310 BUTTON, PLUG 64959 38B			24									6-8	17
X2	F									C	G00320 STRIP, MOUNTING Graybar Inc D2032-2			2									6-8	18
C	F		5305-043-6746							*	G00330 SCREW SAME AS G00080			REF									6-8	19
X2	F									C	G00340 PANEL, JACK MOUNTING 64959 230A			1									6-8	20
X2	F									C	G00350 BRACKET, MOUNTING AAAAA D2032-1			1									6-8	21
C	F									*	G00360 SCREW 96906 MS35225-43			5									6-8	22
C	F		5310-012-0622							*	G00370 WASHER 96906 MS35649-82			13									6-8	
C	F		5310-013-8530							*	G00380 Screw SAME AS G00290			REF									6-8	
X2	F		5340-584-0545							C	G00390 CLAMP, LOOP 83330 838			1									6-8	23

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
C	F		5325-281-1557							C	G00400 GROMMET 96906 MS35489-17			2											
C	F		5325-281-1557							C	G00400 GROMMET 96906 MS35489-17			2										6-8	24
X2	F									C	G00410 CHASSIS, ELECTRICAL EQUIPMENT Graybar Inc D2031			1										6-8	25
A	F	R								C	G00420 AMPLIFIER, VF LINE SAME AS G00110			REF										6-9	
P	F									D	G00430 CAPACITOR,FIXED, 5UF,100WVDC 99141 1F0140-2			4	*	2	2	*	2	2	16	8	6-9	1
P	F									D	G00440 CAPACITOR,FIXED, CERAMIC DIELECTRIC, 0.001UF,500WVDC 99141 11025CD			4	*	2	2	*	2	2	16	8	6-9	2
P	F									D	G00450 CAPACITOR,FIXED, ELECTROLYTIC,75UF,15WVDC 99141 1E0012			4	*	2	2	*	2	2	16	8	6-9	3
P	F		5961-891-8287							D	G00460 SEMICONDUCTOR DEVICE,DIODE 99141 45027R			8	2	2	3	2	2	2	40	24	6-9	4
P	F		5961-814-4792							D	G00470 SEMICONDUCTOR DEVICE,DIODE 99141 40002R			4	*	2	2	2	2	2	19	12	6-9	5

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(10) ILLUSTRATION (B) ITEM OR SYMBOL NUMBER
P	F		5961-891-8290							D	G00480 SEMICONDUCTOR DEVICE,DIODE 99141 45041R			4	*	2	2	2	2	2	19	12	6-9	6
P	F		5935-891-8280							D	G00490 JACK, TIP 99141 52585J			8	*	2	2	*	2	2	16	8	6-9	7
P	F									D	G00500 CONNECTOR,PLUG, ELECTRICAL 99141 53051P			4	*	*	2	*	*	2	10	4	6-9	8
P	F		5961-891-8288							D	G00510 TRANSISTOR 99141 45031T			4	*	2	2	2	2	2	19	12	6-9	9
P	F									D	G00520 TRANSISTOR 99141 45035T			4	*	2	2	2	2	2	19	12	6-9	10
P	F									D	G00530 RESISTOR, VARIABLE 99141 2252CPJA			4	*	2	2	*	2	2	16	8	6-9	11
P	F									D	G00540 RESISTOR 81349 RC20GF910J			4	*	2	2	*	2	2	16	8	6-9	12
P	F		5905-279-2616							D	G00550 RESISTOR 81349 RC20GF153J			4	*	2	2	*	2	2	16	8	6-9	13
P	F		5905-299-1971							D	G00560 RESISTOR 81349 RC20GF822J			4	*	2	2	*	2	2	16	8	6-9	14
P	F		5905-195-5546							D	G00570 RESISTOR 81349 RC20GF390J			4	*	2	2	*	2	2	16	8	6-9	15

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(10) ILLUSTRATION (B) ITEM OR SYMBOL NUMBER
P	F		5905-171-1999							D	G00580 RESISTOR 81349 RC20GF821J			4	*	2	2	*	2	2	16	8	6-9	16
P	F		5905-279-1751							D	G00590 RESISTOR 81349 RC20GF302J			4	*	2	2	*	2	2	16	8	6-9	17
P	F		5905-195-9481							D	G00600 RESISTOR 81349 RC20GF751J			4	*	2	2	*	2	2	16	8	6-9	18
P	F		5905-279-1897							D	G00610 RESISTOR 81349 RC20GF560J			4	*	2	2	*	2	2	16	8	6-9	19
P	F		5905-279-1879							D	G00620 RESISTOR 81349 RC20GF270J			4	*	2	2	*	2	2	16	8	6-9	20
P	F		5905-253-1231							D	G00630 RESISTOR 81349 RC42GF391J			4	*	2	2	*	2	2	16	8	6-9	21
P	F		5950-891-8285							D	G00640 TRANSFORMER, AF 99141 327330HL			4	*	2	2	*	2	2	16	8	6-9	22
P	F		5950-891-8286							D	G00650 TRANSFORMER, AF 99141 327340HL			4	*	2	2	*	2	2	16	8	6-9	23
P	F		5950-891-8284							D	G00660 TRANSFORMER, AF 99141 3174310F			4	*	2	2	*	2	2	16	8	6-9	24
A	F	R								B	G00670 PANEL, SERVICE CHANNEL AND MONITOR SPEAKER SAME AS G00030			REF									6-10	

(1) SOURCE CD (A)	MAINT. CD (B)	REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE																								
X2	F									C	G00680 HANDLE, BOW 12131 95-20093-09			1									6-10	1
P	O		5920-665-2881							C	G00690 FUSE 81349 F02G1R00A			1	2	6	11	4	3	3	130	100	6-10	2
P	O									C	G00700 FUSE 81349 F02GR250A			1	2	6	11	4	3	3	130	100	6-10	3
P	F		5920-581-7957							C	G00710 FUSEHOLDER 81349 FHN19G			2	*	*	*	*	*	*	5	2	6-10	4
P	F		5905-832-5407							C	G00720 RESISTOR, VARIABLE, COMPOSITION,5K,20(,1/2W 11237 2-45			1	*	*	*	*	*	*	5	2	6-10	5
A	F	R								C	G00730 JACK ASSEMBLY, TELEPHONE 12131 24-11607			1									6-10	6
C	F		5305-543-2776							*	G00740 SCREW 96906 MS35233-34			4										
C	F		5310-616-3555							*	G00750 WASHER 96906 MS35333-71			64										
C	F		5310-062-0912							*	G00760 NUT 96906 MS35649-64			43										
X2	F		5965-937-6472							C	G00770 LOUDSPEAKER, PERMANENT MAGNET 07109 3C3			1									6-10	8

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(10) ILLUSTRATION (B) ITEM OR SYMBOL NUMBER
C	F		5305-543-2772							*	G00780 SCREW 96906 MS35233-26			42									6-10	10
C	F		5310-616-3555							*	G00790 WASHER SAME AS G00750			REF										
C	F		5310-062-0912							*	G00800 NUT SAME AS G00760			REF										
P	F									C	G00810 CAPACITOR FIXED, PAPER DIELECTRIC, 2UF, 400WVDC 88419 954NS4Y-M			1	*	*	*	*	*	*	5	2	6-10	10
C	F		5305-022-7095							*	G00820 SCREW 96906 MS35249-35			14										
C	F		5310-616-3555							*	G00830 WASHER SAME AS G00750			REF										
C	F		5310-062-0912							*	G00840 NUT SAME AS G00760			REF										
C	F		5940-620-8424							C	G00850 TERMINAL, LUG 96906 MS35431-4			16									6-10	11
A	F	R								C	G00860 COMPONENT BOARD ASSEMBLY 12131 24-10721			1									6-10	12
A	F	R								C	G00870 COMPONENT BOARD ASSEMBLY 12131 24-10722			1									6-10	13

REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
A	F	R								C	G00880 COMPONENT BOARD ASSEMBLY 12131 24-10720			1									6-10	14
A	F	R								C	G00890 COMPONENT BOARD ASSEMBLY 12131 24-10719			1									6-10	15
C	F		5305-543-2772							*	G00900 SCREW SAME AS G00780			REF										
A	F	R								C	G00910 COMPONENT BOARD ASSEMBLY 12131 24-11620			1									6-10	17
C	F		5305-022-7095							*	G00920 SCREW SAME AS G00820			REF										
P	F		5905-279-1761							C	G00930 RESISTOR 81349 RC20GF621J			4	*	2	2	*	2	2	16	8	6-10	18
P	F		5910-129-6260							C	G00940 CAPACITOR,FIXED, PAPER DIELECTRIC,1UF,600V 88419 DYR6100G			1	*	*	*	*	*	*	5	2	6-10	19
C	F		5305-022-7095							*	G00950 SCREW SAME AS G00820			REF										
C	F		5310-616-3555							*	G00960 WASHER SAME AS G00750			REF										
C	F		5310-062-0912							*	G00970 NUT SAME AS G00760			REF										

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(10) ILLUSTRATION (B) ITEM OR SYMBOL NUMBER
C	F		5940-620-8424							C	G00980 TERMINAL, LUG SAME AS G00850			REF									6-10	20
P	F		5905-689-9564							C	G00990 RESISTOR,FIXED, WIRE WOUND 250 OHM,200MA, 10W 63743 10F250WL			2	*	*	2	*	*	2	10	4	6-10	21
P	F									C	G01000 RESISTOR,FIXED, WIRE WOUND 1000 OHM,100MA, 10W 63743 10F1000WL			1	*	*	*	*	*	*	5	2	6-10	22
C	F									*	G01010 SCREW,MACHINE, FILLISTER HEAD,6-32 BY 2 1/8 IN. LG 99141 COML			3										
C	F									*	G01020 WASHER, SHOULDERED, 6 BY 9/32 OD 99141 COML			6										
C	F									*	G01030 WASHER 96906 MS15795-305			15										
C	F		5310-616-3555							*	G01040 WASHER SAME AS G00750			REF										
P	F		5905-279-1957							C	G01050 RESISTOR 81349 RC42GF151K			1	*	*	*	*	*	*	5	2	6-10	24
C	F									C	G01060 TERMINAL, STUD 95264 6122 98278			2									6-10	25

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(10) ILLUSTRATION (B) ITEM OR SYMBOL NUMBER
C	F		5305-543-2772							*	G01070 SCREW SAME AS G00780			REF									6-10	25
C	F									*	G01080 SCREW 96906 MS35249-33			11										
C	F		5310-616-3555							*	G01090 WASHER SAME AS G00750			REF										
C	F		5310-271-4642							*	G01100 NUT 96906 MS35649-44			11									6-10	
A	F	R								C	G01110 RESISTOR BOARD ASSEMBLY 12131 24-11606			1									6-10	26
C	F		5305-558-2865							*	G01120 SCREW 96906 MS35233-30			5										
C	F		5305-022-7107							*	G01130 SCREW 96906 MS35249-37			1										
C	F		5310-616-3555							*	G01140 WASHER SAME AS G00750			REF										
C	F		5310-062-0912							*	G01150 NUT SAME AS G00760			REF										
P	F		5905-279-2674							D	G01160 RESISTOR 81349 RC20GF201J			1	*	*	*	*	*	*	5	2	6-10	28

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(10) ILLUSTRATION (B) ITEM OR SYMBOL NUMBER
P	F		5905-192-3973							D	G01170 RESISTOR 81349 RC20GF471J			2	*	*	2	*	*	2	10	4	6-10	29
C	F									D	G01180 TERMINAL BOARD 12131 37-10709			1									6-10	
C	F									C	G01190 SPACER, SLEEVE 80205 NAS43-2-12			2									6-10	30
P	F		5950-841-8548							C	G01200 TRANSFORMER, POWER, STEP-DOWN 70674 112A			1	*	*	*	*	*	*	5	2	6-10	31
C	F		5305-543-2772							*	G01210 SCREW SAME AS G00780			REF										
C	F		5310-616-3555							*	G01220 WASHER SAME AS G00750			REF										
X2	F									C	G01230 BRACKET, ANGLE 12131 20-10707			3									6-10	33
C	F									*	G01240 SCREW SAME AS G01080			REF										
C	F		5310-616-3555							*	G01250 WASHER SAME AS G00750			REF										
C	F		5310-062-0912							*	G01260 NUT SAME AS G00760			REF										

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE																								
C	F									C	G01270 NUT, SLEEVE 12131 20-10602-03			2									6-10	37
C	F		5305-558-2865							*	G01280 SCREW SAME AS G01120			REF										
C	F		5940-620-8424							C	G01290 TERMINAL, LUG SAME AS G00850			REF									6-10	39
P	F		5905-984-3221							C	G01300 RESISTOR 81349 RN20X604F			1	*	*	*	*	*	*	5	2	6-10	40
P	F		5950-912-2747							C	G01310 COIL, RF 70674 412A			1	*	*	*	*	*	*	5	2	6-10	41
P	F									C	G01320 TRANSFORMER, RF 98734 2399			2	*	*	2	*	*	2	10	4	6-10	42
P	F									C	G01330 RELAY, ARMATURE 71482 J242C24			1	*	*	2	*	*	2	8	3	6-10	43
P	F		5945-948-9019							C	G01340 RELAY, ARMATURE 71482 J244C24			1	*	*	2	*	*	2	8	3	6-10	44
C	F		5305-543-2772							*	G01350 SCREW SAME AS G00780			REF										
C	F									*	G01360 WASHER SAME AS G01030			REF										
P	F		5961-617-5639							C	G01370 SEMICONDUCTOR DEVICE,DIODE 81483 SD500			1	*	*	2	*	*	2	8	3	6-10	46

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(10) ILLUSTRATION (B) ITEM OR SYMBOL NUMBER
P	F		5910-319-1055							C	G01380 CAPACITOR,FIXED, CERAMIC DIELECTRIC,.01UF, 20%,400V 72136 4DP1-103			2	*	*	2	*	*	2	10	4	6-10	47
P	F		5905-204-7330							C	G01390 RESISTOR,FIXED WIRE WOUND,500 OHM,142MA, 10W 63743 10F500WL			2	*	*	2	*	*	2	10	4	6-10	48
C	F									*	G01400 SCREW MACHINE, BINDING HEAD,6-32 BY 2 1/8 IN. LG 99141 COML			2										
C	F									*	G01410 WASHER, SHOULDERED, 6 BY 9/32 OD 99141 COML			4										
C	F									*	G01420 WASHER SAME AS G01030			REF										
C	F		5310-616-3555							*	G01430 WASHER SAME AS G00750			REF										
C	F		5310-062-0912							*	G01440 NUT SAME AS G00760			REF										
P	F									C	G01450 BUZZER 07065 24V			1	*	*	*	*	*	*	4	1	6-10	50
C	F		5305-022-7007							*	G01460 SCREW 96906 MS35249-10			2										

(1) SOURCE CD (A)	MAINT. CD (B)	REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
C	F		5310-543-4652							*	G01470 WASHER 96906 MS35333-69			2											
C	F		5310-271-4640							*	G01480 NUT 96906 MS35649-24			2										6-10	51
C	F									C	G01490 INSULATOR, PLATE 12131 37-10708-01			1										6-10	52
C	F									C	G01500 INSULATOR, PLATE 12131 37-10708-02			1										6-10	
C	F		5305-638-0653							*	G01510 SCREW 96906 MS35233-14			2											
C	F		5310-550-3715							*	G01520 WASHER 96906 MS35333-70			14											
C	F		5310-271-4642							*	G01530 NUT SAME AS G01100			REF										6-10	53
C	F									C	G01540 GROMMET, PLASTIC 12131 36-20072-09			1										6-10	54
P	F									C	G01550 SEMICONDUCTOR DEVICE,DIODE 80131 191692			1	*	*	2	*	*	2	8	3		6-10	55
P	F									C	G01560 TERMINAL BOARD 1 1/2 BY 1 1/2 BY 3 1/8 IN. LG 83744 20 PIN			1	*	*	*	*	*	*	4	1		6-10	56

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(10) ILLUSTRATION (B) ITEM OR SYMBOL NUMBER
C	F		5305-543-2779							*	G01570 SCREW 96906 MS35233-37			2										
C	F		5310-062-0912							*	G01580 NUT SAME AS G00760			REF										
X2	F									C	G01590 SPACER, TRACK 12131 20-10559-02			2									6-10	58
X2	F									C	G01600 TRACK, DRAWER 12131 20-10558-02			2									6-10	59
C	F		5305-022-7095							*	G01610 SCREW SAME AS G00820			REF										
C	F		5310-616-3555							*	G01620 WASHER SAME AS G00750			REF										
C	F		5310-062-0912							*	G01630 NUT SAME AS G00760			REF										
X2	F		5325-579-6797							C	G01640 STUD,TURNLOCK FASTENER 71286 5S5-7			2									6-10	61
C	F		5310-530-9963							C	G01650 WASHER,SPLIT 71286 5S3-1			2									6-10	
X2	F									C	G01660 BRACKET, ANGLE 12131 20-10560			2									6-10	62

(1) SOURCE CD (A)	MAINT. CD (B)	REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
C	F									*	G01670 SCREW SAME AS G01080			REF										
C	F		5310-616-3555							*	G01680 WASHER SAME AS G00750			REF										
C	F		5310-062-0912							*	G01690 NUT SAME AS G00760			REF										
X2	F									C	G01700 COVER, DUST 12131 20-10705-03			1									6-10	66
X2	F									C	G01710 CHASSIS, ELECTRICAL EQUIPMENT 12131 20-10706			1									6-10	67
C	F		5305-543-2772							*	G01720 SCREW SAME AS G00780			REF										
C	F		5310-616-3555							*	G01730 WASHER SAME AS G00750			REF										
C	F		5310-062-0912							*	G01740 NUT SAME AS G00760			REF										
X2	F									C	G01750 CHASSIS, ELECTRICAL EQUIPMENT 12131 20-10704			1									6-10	69
A	F	R								C	G01760 JACK ASSEMBLY, TELEPHONE SEE FIG. 4 NHA SAME AS G00730			REF									6-11	

REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(10) ILLUSTRATION (B) ITEM OR SYMBOL NUMBER
P	O									D	G01770 LAMP, INCANDESCENT 58854 24C			1	2	2	3	2	2	2	33	20	6-11	1
P	F		6250-023-6555							D	G01780 LAMPHOLDER 82389 LT47			1	*	*	*	*	*	*	4	1	6-11	2
P	O									D	G01790 LENS INDICATOR LIGHT 64959 2L			1	*	*	*	*	*	*	4	1	6-11	3
P	F		5935-194-3092							D	G01800 JACK, TELEPHONE 81349 JJ087			1	*	*	*	*	*	*	4	1	6-11	4
P	F		5935-192-4884							D	G01810 JACK, TELEPHONE 81349 JJ072			1	*	*	*	*	*	*	4	1	6-11	5
P	F									D	G01820 SWITCH, PUSH 82389 11003			1	*	*	2	*	*	2	8	3	6-11	6
C	F		5305-058-2102							*	G01830 SCREW 96906 MS24622-17			4										
X2	F									D	G01840 BLOCK, JACK MOUNTING 12131 39-20096-11			1									6-11	8
A	F	R								C	G01850 COMPONENT BOARD ASSEMBLY SEE FIG. 4 NHA SAME AS G00860			REF									6-12	
P	F		5961-837-1924							D	G01860 SEMICONDUCTOR DEVICE, DIODE 80131 1N91			3	*	2	2	*	2	2	18	9	6-12	1

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(10) ILLUSTRATION (B) ITEM OR SYMBOL NUMBER
P	F									D	G01870 SEMICONDUCTOR DEVICE,DIODE 80131 1N537			1	*	*	2	*	*	2	8	3	6-12	2
P	F									D	G01880 CAPACITOR,FIXED, ELECTROLYTIC,10UF,50V 80183 TE1304			6	*	2	2	2	2	2	19	12	6-12	3
P	F									D	G01890 CAPACITOR,FIXED, PAPER DIELECTRIC 0.33UF, 50V 84411 601PE334-0-5W19			3	*	2	2	*	*	2	13	6	6-12	4
P	F		5910-752-4946							D	G01900 CAPACITOR,FIXED, ELECTROLYTIC,1UF,50V 14655 NLW1-50			4	*	2	2	*	2	2	16	8	6-12	5
P	F									D	G01910 CAPACITOR,FIXED, PAPER DIELECTRIC 84411 601PE224-0-5W19			4	*	2	2	*	2	2	16	8	6-12	6
P	F		5950-910-8493							D	G01920 FILTER, AF, 2.6KC 12131 81-20090-02			1	*	*	*	*	*	*	5	2	6-12	7
P	F		5935-553-2898							D	G01930 JACK, TIP 74970 105-802			6	*	2	2	*	*	2	13	6	6-12	8
P	F									D	G01940 RELAY ARMATURE, 675 OHM,19MA,26.5VDC 98509 7641GA			1	*	*	2	*	*	2	8	3	6-12	9
P	F									D	G01950 TRANSISTOR 80131 2N591			8	2	2	3	2	2	2	40	24	6-12	10

REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE

(1) SOURCE CD (A)	MAINT. CD (B)	REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	F									D	G01960 SOCKET, TRANSISTOR 91662 3303			8	*	2	2	*	2	2	16	8	6-12	11
P	F		5960-578-5775							D	G01970 TRANSISTOR 80131 2N158			1	*	*	2	*	*	2	8	3	6-12	12
P	F		5905-185-6575							D	G01980 RESISTOR 81349 RC20GF392K			3	*	2	2	*	*	2	13	6	6-12	13
P	F		5905-279-1761							D	G01990 RESISTOR SAME AS G00930			REF									6-12	14
P	F		5905-195-6758							D	G02000 RESISTOR 81349 RC20GF273K			2	*	*	2	*	*	2	10	4	6-12	15
P	F		5905-279-3500							D	G02010 RESISTOR 81349 RC20GF183K			1	*	*	*	*	*	*	5	2	6-12	16
P	F		5905-299-1971							D	G02020 RESISTOR Same as G00560			3	*	2	2	*	*	2	13	6	6-12	17
P	F		5905-195-5571							D	G02030 RESISTOR 81349 RC20GF680K			1	*	*	*	*	*	*	5	2	6-12	18
P	F									D	G02040 RESISTOR 81349 RV21AYSA502B			1	*	*	*	*	*	*	5	2	6-12	19
P	F		5905-279-1880							D	G02050 RESISTOR 81349 RC20GF272K			1	*	*	*	*	*	*	5	2	6-12	20
P	F		5905-185-8510							D	G02060 RESISTOR 81349 RC20GF103K			4	*	2	2	*	2	2	16	8	6-12	21

(1) SOURCE CD (A)	MAINT. CD (B)	REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	F		5905-279-3502							D	G02070 RESISTOR 81349 RC20GF123K			1	*	*	*	*	*	*	5	2	6-12	22
P	F		5905-186-3008							D	G02080 RESISTOR 81349 RC20GF101K			3	*	2	2	*	*	2	13	6	6-12	23
P	F		5905-195-6502							D	G02090 RESISTOR 81349 RC20GF332K			2	*	*	2	*	*	2	10	4	6-12	24
P	F		5905-279-3513							D	G02100 RESISTOR 81349 RC20GF221K			1	*	*	*	*	*	*	5	2	6-12	25
P	F									D	G02110 TRANSFORMER 81349 TF6RX12-22			5	*	2	2	*	2	2	19	10	6-12	26
C	F									*	G02120 SCREW, MACHINE, BINDING HEAD, 3-48 BY 3/16 IN. LG 99141 COML			2										
C	F									*	G02130 WASHER, LOCK, NO 3 99141 COML			2										
C	F									*	G02140 NUT, PLAIN HEX., 3-48 99141 COML			2										
C	F		5940-620-8424							D	G02150 TERMINAL, LUG SAME AS G00850			REF									6-12	28
X2	F									D	G02160 BRACKET, ANGLE 12131 20-10371			2									6-12	29

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	B	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(10) ILLUSTRATION (B) ITEM OR SYMBOL NUMBER
C	F									*	G02170 SCREW 96906 MS24641-3			4											
X2	F									D	G02180 BRACKET, ANGLE 12131 20-10739			4										6-12	30
C	F		5305-550-5002							*	G02190 SCREW 96906 MS35233-13			4										6-12	31
C	F		5310-550-3715							*	G02200 WASHER SAME AS G01520			REF										6-12	
C	F									*	G02210 NUT 96906 MS35469-44			3										6-12	
X2	F									D	G02220 BRACKET, ANGLE 12131 20-10718			4										6-12	32
C	F		5305-550-5001							*	G02230 SCREW 96906 MS35233-12			8										6-12	33
C	F		5310-550-3715							*	G02240 WASHER SAME AS G01520			REF										6-12	
C	F									*	G02250 NUT SAME AS G02210			REF										6-12	
C	F									D	G02260 TERMINAL BOARD 12131 37-10716			1										6-12	34
A	F	R								C	G02270 COMPONENT BOARD ASSEMBLY ! SAME AS G00870			REF										6-13	

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(10) ILLUSTRATION (B) ITEM OR SYMBOL NUMBER
P	F									D	G02280 CAPACITOR,FIXED, ELECTROLYTIC,50UF,50V 80183 TE1307			2	*	*	2	*	*	2	10	4	6-13	1
P	F									D	G02290 CAPACITOR,FIXED, ELECTROLYTIC,10UF,50V SAME AS G01880			REF									6-13	2
P	F									D	G02300 CAPACITOR,FIXED, PAPER DIELECTRIC,22UF,50V SAME AS G01910			REF									6-13	3
P	F									D	G02310 CAPACITOR,FIXED, ELECTROLYTIC,50UF 15V 80183 TE1160			1	*	*	*	*	*	*	5	2	6-13	4
P	F									D	G02320 TRANSISTOR SAME AS G01950			REF									6-13	5
P	F									D	G02330 SOCKET, TRANSISTOR SAME AS G01960			REF									6-13	6
P	F		5961-773-7927							D	G02340 TRANSISTOR 80131 2N156			1	*	*	2	*	*	2	8	3	6-13	7
P	F		5905-279-3503							D	G02350 RESISTOR 81349 RC20GF682K			4	*	2	2	*	2	2	16	8	6-13	8
P	F									D	G02360 RESISTOR 81349 RC20GF562K			6	*	2	2	2	2	2	19	12	6-13	9
P	F		5905-195-6791							D	G02370 RESISTOR 81349 RC20GF681K			2	*	*	2	*	*	2	10	4	6-13	10

REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE

(1) SOURCE CD (A)	MAINT. CD (B)	REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	F		5905-722-3822							D	G02380 RESISTOR 81349 RV2LAYSA502B			3	*	2	2	*	*	2	13	6	6-13	11
P	F		5905-295-3410							D	G02390 RESISTOR 81349 RC20GF473K			1	*	*	*	*	*	*	5	2	6-13	12
P	F		5905-195-6451							D	G02400 RESISTOR 81349 RC20GF472K			3	*	2	2	*	*	2	13	6	6-13	13
P	F		5905-171-2002							D	G02410 RESISTOR 81349 RC20GF470K			1	*	*	*	*	*	*	5	2	6-13	14
P	F		5905-195-6817							D	G02420 RESISTOR 81349 RC20GF102K			2	*	*	2	*	*	2	10	4	6-13	15
P	F		5905-195-5514							D	G02430 RESISTOR 81349 RC20GF152K			2	*	*	2	*	*	2	10	4	6-13	16
P	F		5905-251-7757							D	G02440 RESISTOR 81349 RC20GF270K			1	*	*	*	*	*	*	5	2	6-13	17
P	F		5905-171-2005							D	G02450 RESISTOR 81349 RC20GF471K			1	*	*	*	*	*	*	5	2	6-13	18
P	F									D	G02460 TRANSFORMER, AF SAME AS G02110			REF									6-13	19
P	F		5950-901-0873							D	G02470 TRANSFORMER, AF 97965 TA42			1	*	*	*	*	*	*	5	2	6-13	20
C	F									*	G02480 SCREW, MACHINE, BINDING HEAD, 3-48 BY 3/16 IN. LG 99141 COML			4									6-13	21

(1) SOURCE CD (A)	MAINT. CD (B)	REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
C	F									*	G02490 WASHER, LOCK, NO 3 99141 COML			4									6-13	
C	F									*	G02500 NUT,PLAIN,HEX.,3-48 99141 COML			4									6-13	
X2	F									D	G02510 BRACKET, ANGLE SAME AS G02160			REF									6-13	22
C	F									*	G02520 SCREW SAME AS G02170			REF									6-13	
X2	F									D	G02530 BRACKET, ANGLE SAME AS G02180			REF									6-13	23
C	F		5305-550-5002							*	G02540 SCREW SAME AS G02190			REF									6-13	24
C	F		5310-550-3715							*	G02550 WASHER SAME AS G01520			REF									6-13	
C	F		5310-271-4642							*	G02560 NUT SAME AS G01100			REF									6-13	
X2	F									D	G02570 BRACKET, ANGLE SAME AS G02220			REF									6-13	25
C	F		5305-550-5001							*	G02580 SCREW SAME AS G02230			REF									6-13	26
C	F		5310-550-3715							*	G02590 WASHER SAME AS G01520			REF									6-13	

(1) SOURCE CD (A)	MAINT. CD (B)	REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD	(3) DESCRIPTION	UNIT OF ISSUE (4)	QTY INC IN UN PK (5)	QTY INC IN UNIT (6)	30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
C	F									D	G02600 TERMINAL BOARD 12131 37-10713			1									6-13	27
A	F	R								C	G02610 COMPONENT BOARD ASSEMBLY SAME AS G00880			REF									6-14	
P	F									D	G02620 CAPACITOR FIXED, ELECTROLYTIC,10UF,50V SAME AS G01880			REF									6-14	1
P	F		5910-088-0706							D	G02630 CAPACITOR 81349 CM35E502GN3			2	*	*	2	*	*	2	10	4	6-14	2
P	F									D	G02640 CAPACITOR,FIXED, PAPER DIELECTRIC,22UF,50V SAME AS G01910			REF									6-14	3
P	F		5910-752-4946							D	G02650 CAPACITOR,FIXED, ELECTROLYTIC,1UF,50V SAME AS G01900			REF									6-14	4
P	F		5935-553-2898							D	G02660 JACK, TIP SAME AS G01930			REF									6-14	5
P	F		5950-898-7286							D	G02670 REACTOR, 375UH 12131 71-20021-25			1	*	*	*	*	*	*	5	2	6-14	6
P	F									D	G02680 TRANSISTOR SAME AS G01950			REF									6-14	7
P	F									D	G02690 SOCKET, TRANSISTOR SAME AS G01960			REF									6-14	8

REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(10) ILLUSTRATION (B) ITEM OR SYMBOL NUMBER
P	F		5905-279-3503							D	G02700 RESISTOR SAME AS G02350			REF									6-14	9
P	F		5905-195-6758							D	G02710 RESISTOR SAME AS G02000			REF									6-14	10
P	F		5905-195-6451							D	G02720 RESISTOR SAME AS G02400			REF									6-14	11
P	F		5905-299-1971							D	G02730 RESISTOR SAME AS G00560			REF									6-14	12
P	F		5905-279-2616							D	G02740 RESISTOR Same as G00550			1	*	*	*	*	*	*	5	2	6-14	13
P	F		5905-171-1999							D	G02750 RESISTOR 81349 RC20GF821K			1	*	*	*	*	*	*	5	2	6-14	14
P	F									D	G02760 RESISTOR SAME AS G02360			REF									6-14	15
P	F		5905-195-6502							D	G02770 RESISTOR SAME AS G02090			REF									6-14	16
P	F		5905-722-3822							D	G02780 RESISTOR SAME AS G02380			REF									6-14	17
P	F									D	G02790 TRANSFORMER, AF SAME AS G02110			REF									6-14	18
C	F									*	G02800 SCREW, MACHINE, BINDING HEAD, 3-48 BY 3/16 IN. LG 99141 COML			2									6-14	19

(1) SOURCE CD (A)	(1) MAINT CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(10) ILLUSTRATION (B) ITEM OR SYMBOL NUMBER
REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE																								
C	F									*	G02810 WASHER, LOCK, NO 3 99141 COML			2									6-14	
C	F									*	G02820 NUT,PLAIN,HEX.,3-48 99141 COML			2									6-14	
C	F		5940-620-8424							D	G02830 TERMINAL, LUG SAME AS G00850			REF									6-14	20
X2	F									D	G02840 BRACKET, ANGLE SAME AS G02180			REF									6-14	21
C	F		5305-550-5002							*	G02850 SCREW SAME AS G02190			REF									6-14	22
C	F		5310-550-3715							*	G02860 WASHER SAME AS G01520			REF									6-14	
C	F		5310-271-4642							*	G02870 NUT SAME AS G01100			REF										
X2	F									D	G02880 BRACKET, ANGLE SAME AS G02220			REF									6-14	23
C	F		5305-550-5001							*	G02890 SCREW SAME AS G02230			REF										
C	F		5310-550-3715							*	G02900 WASHER SAME AS G01520			REF										
C	F		5310-271-4642							*	G02910 NUT SAME AS G01100			REF										

(1) (A) SOURCE CD	(1) (B) MAINT CD	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	(3) CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(10) (B) ITEM OR SYMBOL NUMBER
C	F									D	G02920 TERMINAL BOARD 12131 37-10715			1									6-14	25
A	F									C	G02930 COMPONENT BOARD ASSEMBLY SAME AS G00890			REF										
P	F									D	G02940 CAPACITOR,FIXED, ELECTROLYTIC,50UF,50V SAME AS G02280			REF									6-15	1
P	F									D	G02950 CAPACITOR,FIXED, ELECTROLYTIC,10UF,50V SAME AS G01880			REF									6-15	2
P	F		5910-959-3277							D	G02960 CAPACITOR,FIXED, ELECTROLYTIC,5UF,50V 14655 NLW5-50			2	*	*	2	*	*	2	10	4	6-15	3
P	F									D	G02970 CAPACITOR,FIXED, CERAMIC DIELECTRIC,.05UF, 10%,40WVDC 72138 40P3-503			1	*	*	*	*	*	*	5	2	6-15	4
P	F		5935-553-2898							D	G02980 JACK, TIP SAME AS G01930			REF									6-15	5
P	F									D	G02990 TRANSISTOR SAME AS G01950			REF									6-15	6
P	F									D	G03000 SOCKET, TRANSISTOR SAME AS G01960			REF									6-15	7

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(10) ILLUSTRATION (B) ITEM OR SYMBOL NUMBER
P	F		5905-185-6575							D	G03010 RESISTOR SAME AS G01980			REF									6-15	8
P	F		5905-279-1890							D	G03020 RESISTOR 81349 RC20GF391K			2	*	*	2	*	*	2	10	4	6-15	9
P	F		5905-195-6791							D	G03030 RESISTOR SAME AS G02370			REF									6-15	10
P	F									D	G03040 RESISTOR SAME AS G02360			REF									6-15	11
P	F		5905-186-3008							D	G03050 RESISTOR SAME AS G02080			REF									6-15	12
P	F		5905-722-3822							D	G03060 RESISTOR SAME AS G02380			REF									6-15	13
P	F		5905-195-6451							D	G03070 RESISTOR SAME AS G02400			REF									6-15	14
P	F		5905-279-3503							D	G03080 RESISTOR SAME AS G02350			REF									6-15	15
P	F		5905-171-1997							D	G03090 RESISTOR 81349 RC20GF331K			1	*	*	*	*	*	*	5	2	6-15	16
P	F									D	G03100 TRANSFORMER, AF SAME AS G02110			REF									6-15	17
C	F									*	G03110 SCREW, MACHINE, BINDING HEAD, 3-48 BY 3/16 IN. LG 99141 COML			4										

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(10) ILLUSTRATION (B) ITEM OR SYMBOL NUMBER
C	F									*	G03120 WASHER, LOCK, NO 3 99141 COML			4										
C	F									*	G03130 NUT,PLAIN,HEX.,3-48 99141 COML			4										
C	F		5940-620-8424							D	G03140 TERMINAL,LUG SAME AS G00850			REF									6-15	19
X2	F									D	G03150 BRACKET, ANGLE SAME AS G02180			REF									6-15	20
C	F		5305-550-5002							*	G03160 SCREW SAME AS G02190			REF										
C	F		5310-550-3715							*	G03170 WASHER SAME AS G01520			REF										
C	F		5310-271-4642							*	G03180 NUT SAME AS G01100			REF										
X2	F									D	G03190 BRACKET, ANGLE SAME AS G02220			REF									6-15	22
C	F		5305-550-5001							*	G03200 SCREW SAME AS G02230			REF										
C	F		5310-550-3715							*	G03210 WASHER SAME AS G01520			REF										
C	F		5310-271-4642							*	G03220 NUT SAME AS G01100			REF										

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(10) ILLUSTRATION (B) ITEM OR SYMBOL NUMBER
C	F									D	G03230 TERMINAL BOARD 12131 37-10714			1									6-15	24
A	F	R								C	G03240 COMPONENT BOARD ASSEMBLY SAME AS G00910			REF									6-16	
A	F	R								D	G03250 COMPONENT BOARD ASSEMBLY 12131 24-11618			1									6-16	1
C	F		5305-543-2772							*	G03260 SCREW SAME AS G00780			REF										
C	F		5310-616-3555							*	G03270 WASHER SAME AS G00750			REF										
C	F									D	G03280 SPACER, SLEEVE 80205 NAS43-2-36			8									6-16	4
C	F		5940-620-8424							D	G03290 TERMINAL, LUG SAME AS G00850			REF									6-16	5
X2	F									D	G03300 BRACKET, ANGLE SAME AS G01230			REF									6-16	6
A	F	R								D	G03310 RESISTOR ASSEMBLY SEE FIG. 12 12131 24-10738			1									6-16	7
A	F	R								D	G03320 COMPONENT BOARD ASSEMBLY SEE FIG. 10 NHA SAME AS G03250			REF									6-17	

REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(10) ILLUSTRATION (B) ITEM OR SYMBOL NUMBER
P	F		5961-814-4251							E	G03330 SEMICONDUCTOR DEVICE,DIODE 80131 1N1692			4	*	2	2	2	2	2	19	12	6-17	1
C	F									E	G03340 TERMINAL BOARD 12131 37-10710			1									6-17	2
A	F	R								D	G03350 RESISTOR ASSEMBLY SAME AS G03310			REF										
P	F		5905-993-6341							E	G03360 RESISTOR 81349 RN20X751F			24	2	3	6	3	2	2	71	48	6-18	1
C	F									E	G03370 TERMINAL BOARD 12131 37-10711			1									6-18	2
A	F	R								B	G03380 POWER SUPPLY PEC2744 SAME AS G00040			REF									6-19	
X2	F									C	G03390 COVER 04650 4150520			2									6-19	1
C	F		5305-043-6691							*	G03400 SCREW 96906 MS35225-41			12										
C	F		5310-013-1044							*	G03410 WASHER 96906 MS35338-22			52										
P	F									C	G03420 CAPACITOR,FIXED, PAPER DIELECTRIC,4UF, 440VAC 04650 3040862			1	*	*	*	*	*	*	5	2	6-19	4

(1) SOURCE CD (A)	MAINT. CD (B)	REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	F									C	G03430 BRACKET, CAPACITOR MOUNTING 04650 4100171			2										6-19	5
C	F									*	G03440 SCREW 96906 MS35225-48			2											
C	F		5310-013-1044							*	G03450 WASHER SAME AS G03410			REF											
C	F		5310-012-0622							*	G03460 Washer SAME AS G00370			REF											
X2	F									C	G03470 RETAINER, CAPACITOR 04650 4100105			1										6-19	7
C	F		5310-080-8495							*	G03480 NUT 96906 MS35425-39			1											
C	F		5310-983-8483							*	G03490 WASHER 96906 MS15795-205			15											
C	F		5310-012-1637							*	G03500 WASHER 96906 MS35338-25			7											
C	F		5306-903-8593							C	G03510 BOLT 96906 MS35751-30			1										6-19	11
P	F									C	G03520 CAPACITOR,FIXED, ELECTROLYTIC,12000UF,25VAC 04650 3040936			2	*	*	2	*	*	2	10	4		6-19	12

(1) SOURCE CD (A)	MAINT. CD (B)	REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	F									C	G03530 BRACKET, CONDENSER MOUNTING 04650 4100166			1									6-19	13
C	F		5305-013-3482							*	G03540 SCREW 96906 MS35241-50			1										
C	F									*	G03550 SCREW SAME AS G00360			REF										
C	F		5310-013-1044							*	G03560 WASHER SAME AS G03410			REF										
C	F		5310-012-0622							*	G03570 Washer SAME AS G00370			REF										
P	F									C	G03580 CAPACITOR,FIXED, ELECTROLYTIC,2500UF,45VDC 04650 3040707			1	*	*	*	*	*	*	5	2	6-19	15
C	F									*	G03590 SCREW 96906 MS35225-31			11										
C	F		5310-013-1044							*	G03600 WASHER SAME AS G03410			REF										
C	F		5310-013-4530							*	G03610 NUT SAME AS G00170			REF										
X2	F									C	G03620 BRACKET, CONDENSER MOUNTING 04650 4100109			1									6-19	19

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(10) ILLUSTRATION (B) ITEM OR SYMBOL NUMBER
C	F									*	G03630 SCREW 96906 MS35225-29			4											
C	F		5310-983-8483							*	G03640 WASHER SAME AS G03490			REF											
C	F		5310-013-1044							*	G03650 WASHER SAME AS G03410			REF											
C	F		5310-013-4530							*	G03660 NUT SAME AS G00170			REF											
F	F		5961-922-8661							C	G03670 SEMICONDUCTOR DEVICE,DIODE 04713 1N3209			2	*	2	2	*	*	2	13	6	6-19	21
C	F		5310-012-1637							*	G03680 WASHER SAME AS G03500			REF											
C	F		5310-543-5656							*	G03690 NUT 96906 MS35691-402			6											
X2	F		5970-839-3530							C	G03700 BUSHING, ELECTRICAL CONDUCTOR 08863 N20798			8									6-19	24
C	F		5940-247-8216							C	G03710 TERMINAL, LUG 71785 1467A			1									6-19	25
X2	F									C	G03720 BRACKET, ANGLE 04650 4433289			1									6-19	26

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(10) ILLUSTRATION (B) ITEM OR SYMBOL NUMBER
C	F									*	G03730 SCREW 96906 MS35241-37			1										
C	F		5305-043-6665							*	G03740 SCREW SAME AS G00150			REF										
C	F		5310-013-1044							*	G03750 WASHER SAME AS G03410			REF										
C	F		5310-013-4530							*	G03760 NUT SAME AS G00170			REF										
X2	F									C	G03770 INSULATOR, PLATE 04650 4281757			1									6-19	28
P	O		5920-131-9816							C	G03780 FUSE, CARTRIDGE 71400 MDL1			1	2	6	11	4	3	3	130	100	6-19	29
P	O									C	G03790 FUSE, CARTRIDGE 71400 MDL2 1/2			1	2	6	11	4	3	3	130	100	6-19	30
P	F		5920-937-5333							C	G03800 FUSEHOLDER 71400 HKP-EDNQZ			2	*	*	*	*	*	*	5	2	6-19	31
P	F		5935-946-7713							C	G03810 JACK, TIP 72825 7115 RED			2	*	*	*	*	*	*	5	2	6-19	32
P	F									C	G03820 JACK, TIP 72825 7115 BLACK			2	*	*	*	*	*	*	5	2	6-19	33
P	F		5950-891-8292							C	G03830 REACTOR 04650 6225395			1	*	*	*	*	*	*	5	2	6-19	34

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
C	F									*	G03840 SCREW 96906 MS35241-52			2											
C	F									*	G03850 SCREW 96906 MS35225-45			2											
C	F		5310-186-7410							*	G03860 WASHER SAME AS G00160			REF											
C	F		5310-013-1044							*	G03870 WASHER SAME AS G03410			REF											
C	F		5310-012-0622							*	G03880 Washer SAME AS G00370			REF										6-19	35
P	F									C	G03890 RESISTOR,FIXED, WIRE WOUND,100 OHM,5(,25W 04650 3407413			1	*	*	*	*	*	*	5	2	6-19	36
C	F									*	G03900 SCREW,MACHINE, 8-32 BY 2 1/2 IN. LG 99141 COML			1										
C	F									*	G03910 WASHER,SADDLE, 0.173 ID BY 5/8 OD BY 5/32 THK. 99141 COML			2										
C	F									*	G03920 WASHER,NM,0.437 ID BY 0.750 OD BY 1/32 IN. THK. 99141 COML			3										

REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(10) ILLUSTRATION (B) ITEM OR SYMBOL NUMBER
C	F		5310-013-1044							*	G03930 WASHER SAME AS G03410			REF										
C	F		5310-186-7410							*	G03940 WASHER SAME AS G00160			REF										
C	F		5310-012-0622							*	G03950 Wahser SAME AS G00370			REF										
P	F		5905-107-9036							C	G03960 RESISTOR, ADJUSTABLE,25 OHM,10%,10W 44655 1009			1	*	*	*	*	*	*	5	2	6-19	38
C	F									*	G03970 SCREW,MACHINE, 6-32 BY 2 1/4 IN. LG 99141 COML			1										
C	F									*	G03980 WASHER, NM, 5/32 ID BY 7/16 OD BY 1/32 IN. THK. 99141 COML			3										
C	F		5310-983-8483							*	G03990 WASHER SAME AS G03490			REF										
C	F		5310-013-1044							*	G04000 WASHER SAME AS G03410			REF										
C	F		5310-013-4530							*	G04010 NUT SAME AS G00170			REF										
P	F		5905-296-8473							C	G04020 RESISTOR, VARIABLE 90201 R1500L			1	*	*	*	*	*	*	5	2	6-19	40

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(10) ILLUSTRATION (B) ITEM OR SYMBOL NUMBER
X1	F									C	G04030 BRACKET, ANGLE 04650 4081687			1									6-19	41
C	F									*	G04040 SCREW SAME AS G03630			REF										
C	F		5310-013-1044							*	G04050 WASHER SAME AS G03410			REF										
C	F		5310-013-4530							*	G04060 NUT SAME AS G00170			REF										
X2	F									C	G04070 TERMINAL BOARD 71785 7-141YE			1									6-19	43
C	F		5305-043-6666							*	G04080 SCREW SAME AS G03590			REF										
C	F									*	G04090 WASHER SAME AS G03490			REF										
C	F		5310-013-1044							*	G04100 WASHER SAME AS G03410			REF										
X2	F									C	G04110 CLIP, SPRING TENSION 04650 4220201			2									6-19	45
X2	F									C	G04120 SHIELD, TERMINAL 04650 4287407			1									6-19	46
X2	F									C	G04130 INSULATOR, PLATE 04650 4281883			1									6-19	47

REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	F									C	G04140 TRANSFORMER 04650 6016226			1	*	*	*	*	*	*	5	2	6-19	48
C	F		5305-043-6750							*	G04150 SCREW 96906 MS35226-63			2									6-19	49
C	F		5305-333-9520							*	G04160 SCREW 96906 MS35240-72			2										
C	F		5310-809-8546							*	G04170 WASHER 96906 MS15795-208			4										
C	F		5310-043-2226							*	G04180 WASHER 96906 MS35338-24			10										
C	F		5310-012-0614							*	G04190 NUT 96906 MS35650-102			10										
P	F		5950-891-8291							C	G04200 REACTOR 04650 6123380			1	*	*	*	*	*	*	5	2	6-19	50
C	F		5305-550-1651							*	G04210 SCREW 96906 MS35226-80			4										
C	F									*	G04220 WASHER 96906 MS15795-209			4										
C	F		5310-012-1637							*	G04230 WASHER SAME AS G03500			REF										
C	F		5310-543-5656							*	G04240 NUT SAME AS G03690			REF										

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	F									C	G04250 SEMICONDUCTOR DEVICE,DIODE 05277 320A			4	*	2	2	2	2	2	19	12	6-19	52
P	F		5961-051-4824							C	G04260 TRANSISTOR 04713 2N2138			4	*	2	2	2	2	2	19	12	6-19	53
C	F		5305-043-6665							*	G04270 SCREW SAME AS G00150			REF										
C	F		5310-013-1044							*	G04280 WASHER SAME AS G03410			REF										
C	F		5310-013-4530							*	G04290 NUT SAME AS G00170			REF										
P	F		5905-171-2004							C	G04300 RESISTOR 81349 RC20GF223J			2	*	*	2	*	*	2	10	4	6-19	55
P	F		5905-256-0415							C	G04310 RESISTOR 81349 RC20GF161J			4	*	2	2	*	2	2	16	8	6-19	56
X2	F									C	G04320 HEATSINK, ELECTRICAL-ELECTRONIC COMPONENT 04650 6165481			1									6-19	57
X2	F									C	G04330 HEATSINK, ELECTRICAL-ELECTRONIC COMPONENT 04650 6165482			1									6-19	58

(1) SOURCE CD (A)	MAINT. CD (B)	REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	F									C	G04340 HEATSINK, ELECTRICAL-ELECTRONIC COMPONENT 04650 6165483			1									6-19	59
C	F									*	G04350 SCREW SAME AS G03590			REF										
C	F		5310-983-8483							*	G04360 WASHER SAME AS G03490			REF										
C	F		5310-013-1044							*	G04370 WASHER SAME AS G03410			REF										
C	F		5310-013-4530							*	G04380 NUT SAME AS G00170			REF										
C	F									D	G04390 TERMINAL, LUG 27494 3449-6B			5									6-19	64
C	F									*	G04400 SCREW 96906 MS35227-27			5										
C	F		5310-013-1044							*	G04410 WASHER SAME AS G03410			REF										
C	F									D	G04420 TERMINAL, LUG 71279 1724D			4									6-19	65
X2	F									D	G04430 HEATSINK 04650 4432156			1									6-19	66

(1) SOURCE CD (A)	MAINT. CD (B)	REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	F									D	G04440 HEATSINK 04650 4432157			1									6-19	67
X2	F									D	G04450 HEATSINK 04650 4432158			1									6-19	68
X2	F		5970-839-3530							C	G04460 BUSHING, Electrical Connector Same As G03700			REF									6-19	69
X2	F									C	G04470 INSULATOR, PLATE 04650 4281882			2									6-19	70
X2	F									C	G04480 INSULATOR, PLATE 04650 4281881			1									6-19	71
C	F									C	G04490 INSULATOR, BUSHING 04650 3030045			1									6-19	72
X2	F									C	G04500 PANEL, FRONT 04650 4361474			1									6-19	73
C	F		5305-043-6751							*	G04510 SCREW 96906 MS35226-64			6										
C	F		5310-043-2226							*	G04520 WASHER SAME AS G04180			REF										
C	F		5310-012-0614							*	G04530 NUT SAME AS G04190			REF										
X2	F									C	G04540 CHASSIS, ELECTRICAL EQUIPMENT 04650 4150519			1									6-19	75

REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD.	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATION (A) FIGURE NUMBER	(10) ILLUSTRATION (B) ITEM OR SYMBOL NUMBER
A	F	R								B	G04550 HANDSET SAME AS G00050			REF									6-20	
P	F		5965-324-9210							C	G04560 MICROPHONE ELEMENT 64959 T1			1	*	*	*	*	*	*	4	1	6-20	1
P	F									C	G04570 EARPHONE ELEMENT 64959 U1			1	*	*	*	*	*	*	4	1	6-20	2
P	F		5935-259-1943							C	G04580 PLUG, TELEPHONE 64959 2898			1	*	*	*	*	*	*	4	1	6-20	3
M	H									C	G04590 CORD ASSEMBLY, ELECTRICAL 64959 H4BH-3			1									6-20	4
X2	F		5965-317-1679							C	G04600 HANDLE, HANDSET 64959 P339616			1									6-20	5

SECTION V. INDEX-FEDERAL STOCK NUMBER CROSS REFERENCE TO INDEX NUMBER

FEDERAL STOCK NUMBER	INDEX NO.	FEDERAL STOCK NUMBER	INDEX NO.	FEDERAL STOCK NUMBER	INDEX NO.
5305-022-7007	G01460	5310-062-0912	G00760	5905-195-5571	G02030
5305-022-7095	G00820	5310-080-8495	G03480	5905-195-6451	G02400
5305-022-7107	G01130	5310-186-7410	G00160	5905-195-6502	G02090
5305-043-6638	G00210	5310-271-4640	G01480	5905-195-6758	G02000
5305-043-6663	G00190	5310-271-4642	G01100	5905-195-6791	G02370
5305-043-6665	G00150	5310-527-3290	G00220	5905-195-6817	G02420
5305-043-6691	G03400	5310-530-9963	G01650	5905-195-9481	G00600
5305-043-6696	G00280	5310-543-4652	G01470	5905-204-7330	G01390
5305-043-6750	G04150	5310-543-5656	G03690	5905-251-7757	G02440
5305-043-6751	G04510	5310-550-3715	G01520	5905-253-1231	G00630
5305-058-2102	G01830	5310-616-3555	G00750	5905-256-0415	G04310
5305-333-9520	G04160	5310-809-8546	G04170	5905-279-1751	G00590
5305-543-2772	G00780	5310-983-8483	G03490	5905-279-1761	G00930
5305-543-2776	G00740	5325-281-1557	G00400	5905-279-1879	G00620
5305-543-2779	G01570	5325-579-6797	G01640	5905-279-1880	G02050
5305-550-1651	G04210	5340-584-0545	G00390	5905-279-1890	G03020
5305-550-5001	G02230	5905-078-6915	G00250	5905-279-1897	G00610
5305-550-5002	G02190	5905-107-9036	G03960	5905-279-1957	G01050
5305-558-2865	G01120	5905-171-1997	G03090	5905-279-2616	G00550
5305-638-0653	G01510	5905-171-1999	G00580	5905-279-2674	G01160
5306-903-8593	G03510	5905-171-2002	G02410	5905-279-3500	G02010
5310-012-0614	G04190	5905-171-2004	G04300	5905-279-3502	G02070
5310-012-0622	G00370	5905-171-2005	G02450	5905-279-3503	G02350
5310-012-1637	G03500	5905-185-6575	G01980	5905-279-3513	G02100
5310-013-1044	G03410	5905-185-8510	G02060	5905-295-3410	G02390
5310-013-4524	G00230	5905-186-3008	G02080	5905-296-8473	G04020
5310-013-4530	G00170	5905-192-3973	G01170	5905-299-1971	G00560
5310-013-8530	G00290	5905-195-5514	G02430	5905-689-9564	G00990
5310-043-2226	G04180	5905-195-5546	G00570	5905-722-3822	G02380

SECTION V. INDEX-FEDERAL STOCK NUMBER CROSS REFERENCE TO INDEX NUMBER (CONTINUED)

FEDERAL STOCK NUMBER	INDEX NO.
5905-832-5407	G00720
5905-968-5141	G00260
5905-984-3221	G01300
5905-993-6341	G03360
5910-088-0706	G02630
5910-129-6260	G00940
5910-319-1055	G01380
5910-752-4946	G01900
5910-959-3277	G02960
5920-131-9816	G03780
5920-581-7957	G00710
5920-665-2881	G00690
5920-937-5333	G03800
5935-192-4884	G01810
5935-194-3092	G01800
5935-243-8158	G00180
5935-259-1943	G04580
5935-549-5424	G00130
5935-553-2898	G01930
5935-665-4573	G00200
5935-891-8280	G00490
5935-946-7713	G03810
5940-247-8216	G03710
5940-620-8424	G00850
5940-686-8168	G00240
5945-948-9019	G01340
5950-841-8548	G01200
5950-891-8284	G00660
5950-891-8285	G00640
5950-891-8286	G00650
5950-891-8291	G04200
5950-891-8292	G03830
5950-898-7286	G02670
5950-901-0873	G02470
5950-910-8493	G01920
5950-912-2747	G01310
5960-578-5775	G01970
5961-051-4824	G04250
5961-617-5639	G01370
5961-773-7927	G02340
5961-814-4251	G0330
5961-814-4792	G00470
5961-837-1924	G01860
5961-891-8287	G00460
5961-891-8288	G00510
5961-891-8290	G00480
5961-922-8661	G03670
5965-317-1679	G04600
5965-324-9210	G04560
5965-937-6472	G00770
5970-839-3530	G03700
6250-023-6555	G01780

REF. NO.	INDEX NO.
B2035	G00070

REF. NUMBER	INDEX NO.
D2031	G00410
D2032-1	G00350
D2032-2	G00320
D2036-16	G00300
F02GR250A	G00700
F6A	G00140
G1AR-3	G00500
GB320	G00010
GB320-1	G00020
GB624	G00110
H4BH-3	G04590
J242C24	G01330
MDL2 1/2	G03790
MS15795-209	G04220
MS15795-305	G01030
MS24641-3	G02170
MS35225-29	G03630
MS35225-31	G03590
MS35225-43	G00360
MS35225-45	G03850
MS35225-48	G03440
MS35226-59	G00080
MS35227-27	G04400
MS35241-10	G00100
MS35241-37	G03730
MS35241-52	G03840
MS35249-33	G01080
MS35469-44	G02210
NAS43-2-12	G01190
NAS43-2-36	G03280
RC20GF562K	G02360
RC20GF910J	G00540
TE1160	G02310
TE1304	G01880
TE1307	G02280
TF6RX12-22	G02110
U1	G04570
1E0012	G00450
1F0140-2	G00430
1N537	G01870
10F1000WL	G01000
10515	G00030
11003	G01820
11025CD	G00440
157C	G00270
17240	G04420
191692	G01550

SECTION V. INDEX-FEDERAL STOCK NUMBER CROSS REFERENCE TO INDEX NUMBER (CONTINUED)

REF. NUMBER	INDEX NO.
2L	G01790
2N591	G01950
20P1N	G01560
20-10371	G02160
20-10558-02	G01600
20-10559-02	G01590
20-10560	G01660
20-10602-03	G01270
20-10704	G01750
20-10705-03	G01700
20-10706	G01710
20-10707	G01230
20-10718	G02220
20-10739	G02180
2252CPJA	G00530
230A	G00340
2399	G01320
24C	G01770
24V	G01460
24-10719	G00890
24-10720	G00880
24-10721	G00860
24-10722	G00870
24-10738	G03310
24-11606	G01110
24-11607	G00730
24-11618	G03250
24-11620	G00910
3030045	G04490
3040707	G03580
3040862	G03420
3040936	G03520
320A	G04250
3303	G01960
3407413	G03890
3449-6B	G04390
36-20072-09	G01540
37-10708-02	G01500
37-10709	G01180
37-10710	G03340
37-10711	G03370
37-10713	G02600
37-10714	G03230
37-10715	G02920
37-10716	G02260
38B	G00310
39-20096-11	G01840
4DP3-503	G02970
400WVDC	G00810
4081687	G04030
4100105	G03470
4100109	G03620
4100166	G03530
4100171	G03430
4150519	G04540
4150520	G03390
4220201	G04110
4281757	G03770
4281881	G04480
4281882	G04470
4281883	G04130
4287407	G04120
4361474	G04500
4432156	G04430
4432157	G04440
4432158	G04450
4433289	G03720
45035T	G00520
53051P	G00500
601PE224-0-5W19	G01910
601PE334-0-5W19	G01890
6016226	G04140
6066477	G00040
6122	G01060
6165481	G04320
616482	G04330
7115	G03820
7-141YE	G04070
6165483	G04340
7641GA	G01940
89BR-17DB	G00120
95-20093-09	G00680

SECTION VI. INDEX-FIGURE AND ITEM NUMBER CROSS REFERENCE TO INDEX NUMBER

FIG. NO.	ITEM NO. OR REFERENCE DESIGNATION	INDEX NO.
6-7	1	G00020
	2	G00030
	3	G00040
	4	G00050
6-8	1	G00070
	2	G00080
	3	G00090
	4	G00100
	5	G00110
	6	G00120
	7	G00130
	8	G00140
	9	G00150
	10	G00180
	11	G00200
	12	G00210
	13	G00240
	14	G00250
	15	G00260
	16	G00270
	17	G00310
	18	G00320
	19	G00330
	20	G00340
	21	G00350
	22	G00360
	23	G00390
	24	G00400
	25	G00410
6-9	1	G00430
	2	G00440
	3	G00450
	4	G00460
	5	G00470
	6	G00480
	7	G00490
	8	G00500
	9	G00510
	10	G00520
	11	G00530
	12	G00540
	13	G00550
	14	G00560
	15	G00570
	16	G00580
	17	G00590
	18	G00600
	19	G00610
	20	G00620
	21	G00630
	22	G00640
	23	G00650
	24	G00660
6-10	1	G00680
	2	G00690
	3	G00700
	4	G00710
	5	G00720
	6	G00730
	8	G00770
	10	G00810
	11	G00850
	12	G00860
	13	G00870
	14	G00880
	15	G00890
	17	G00910
	18	G00930
	19	G00940
	20	G00980
	21	G00990
	22	G01000
	24	G01050
	25	G01060
	26	G01110
	28	G01160
	29	G01170
	30	G01190
	31	G01200
	33	G01230
	37	G01270
	39	G01290
	40	G01300
	41	G01310
	42	G01320
	43	G01330
	44	G01340
	46	G01370
	47	G01380
	48	G01390
	50	G01450
	51	G01480
	52	G01490
	53	G01530
	54	G01540
	55	G01550
	56	G01560
	58	G01590
	59	G01600
	61	G01640
	62	G01660
	66	G01700
	67	G01710
	69	G01750
6-11	1	G01770
	2	G01780
	3	G01790
	4	G01800
	5	G01810
	6	G01820
	8	G01840
6-12	1	G01860
	2	G01870
	3	G01880
	4	G01890
	5	G01900
	6	G01910
	7	G01920
	8	G01930
	9	G01940
	10	G01950
	11	G01960
	12	G01970

SECTION VI. INDEX-FIGURE AND ITEM NUMBER CROSS REFERENCE TO INDEX NUMBER (CONTINUED)

FIG. NO.	ITEM NO. OR REFERENCE DESIGNATION	INDEX NO.
6-12	13	G01980
	14	G01990
	15	G02000
	16	G02010
	17	G02020
	18	G02030
	19	G02040
	20	G02050
	21	G02060
	22	G02070
	23	G02080
	24	G02090
	25	G02100
	26	G02110
	28	G02150
	29	G02160
	30	G02180
	31	G02190
	32	G02220
	33	G02230
	34	G02260
6-13	1	G02280
	2	G02290
	3	G02300
	4	G02310
	5	G02320
	6	G02330
	7	G02340
	8	G02350
	9	G02360
	10	G02370
	11	G02380
	12	G02390
	13	G02400
	14	G02410
	15	G02420
	16	G02430
	17	G02440
	18	G02450
	19	G02460
	20	G02470
	21	G02480
	22	G02510
	23	G02530
	24	G02540
	25	G02570
	26	G02580
	27	G02600
6-14	1	G02620
	2	G02630
	3	G02640
	4	G02650
	5	G02660
	6	G02670
	7	G02680
	8	G02690
	9	G02700
	10	G02710
	11	G02720
	12	G02730
	13	G02740
	14	G02750
	15	G02760
	16	G02770
	17	G02780
	18	G02790
	19	G02800
	20	G02830
	21	G02840
	22	G02850
	23	G02880
	25	G02920
6-15	1	G02940
	2	G02950
	3	G02960
	4	G02970
	5	G02980
	6	G02990
	7	G03000
	8	G03010
	9	G03020
	10	G03030
	11	G03040
	12	G03050
	13	G03060
	14	G03070
	15	G03080
	16	G03090
	17	G03100
	19	G03140
	20	G03150
	22	G03190
	24	G03230
6-16	1	G03250
	4	G03280
	5	G03290
	6	G03300
	7	G03310
6-17	1	G03330
	2	G03340
6-18	1	G03360
	2	G03370
6-19	1	G03390
	4	G03420
	5	G03430
	7	G03470
	11	G03510
	12	G03520
	13	G03530
	15	G03580
	19	G03620
	21	G03670
	24	G03700
	25	G03710
	26	G03720
	28	G03770
	29	G03780
	30	G03790
	31	G03800
	32	G03810
	33	G03820
	34	G03830
	35	G03880

SECTION VI. INDEX-FIGURE AND ITEM NUMBER CROSS REFERENCE TO INDEX NUMBER (CONTINUED)

FIG. NO.	ITEM NO. OR REFERENCE DESIGNATION	INDEX NO.
6-19	36	G03890
	38	G03960
	40	G04020
	41	G04030
	43	G04070
	45	G04110
	46	G04120
	47	G04130
	48	G04140
	49	G04150
	50	G04200
	52	G04250
	53	G04260
	55	G04300
	56	G04310
	57	G04320
	58	G04330
	59	G04340
	64	G04390
	65	G04420
	66	G04430
	67	G04440
	68	G04450
	69	G04460
	70	G04470
	71	G04480
	72	G04490
	73	G04500
	75	G04540
6-20	1	G04560
	2	G04570
	3	G04580
	4	G04590
	5	G04600

FIG. NO.	ITEM NO. OR REFERENCE DESIGNATION	INDEX NO.

CROSS-REFERENCE INDEX

(Prefix each Reference Number with the Chapter Number denoted by the Column.)
(KEY: Numbers preceded by "f" are illustrations; "t" are tables; others are paragraphs.)

OFFICIAL NOMENCLATURE Common Name	Chapter 2 Installation	Chapter 3 Operation	Chapter 4 Principles of Operation	Chapter 5 Org/Field Maintenance	Chapter 5 Alignment	Chapter 6 Circuit Diagrams
Attenuator Pad FIXED ATTENUATOR CN-1009/MRC-85(V)2	16		30, 43, 66	f1		f1, f2, f3
AUDIO FREQUENCY AMPLIFIER AM-4168/MRC-85(V)2 VF Line Amplifier	16		7, 9, 30, 33 40, 44, 49, 87	f1, f2, t2	20	f4
Control Unit TELEPHONE SET CONTROL C-6370/MRC-85(V)2	5, 16, 23, 24, 33, f1, t1		5, 28	13, f1, t2		f1, f2, f3
FIXED ATTENUATOR CN-1009/MRC-85(V)2 Attenuator Pad	16		30, 43, 66	f1		f1, f2, f3
HANDSET H-242/MRC-85(V)2 Handset	t1	9, 11, 12, 14	14, 20, 21, 66, 67, 80, 82, 84			
Handset HANDSET H-242/MRC-85(V)2	t1	9, 11, 12, 14	14, 20, 21, 66, 67, 80, 82, 84			
POWER SUPPLY PP-4168/MRC-85(V)2 Power Supply	28, 33, f1, t1	8, 16, 18, 24	83, 90	f4, t2	24	f6
Power Supply POWER SUPPLY PP-4168/MRC-85(V)2	28, 33, f1, t1	8, 16, 18, 24	83, 90	f4, t2	24	f6
Service Channel and Monitor Speaker Panel TELEPHONE SET TA-594/MRC-85(V)2	16, 23, 33, f1, t1	9, f1	7, 11, 34, 35, 36, 56, 89	f3, t2	22	f5

CROSS-REFERENCE INDEX (Cont)

(Prefix each Reference Number with the Chapter Number denoted by the Column.)
(KEY: Numbers preceded by "f" are illustrations; "t" are tables; others are paragraphs.)

OFFICIAL NOMENCLATURE Common Name	Chapter 2 Installation	Chapter 3 Operation	Chapter 4 Principles of Operation	Chapter 5 Org/Field Maintenance	Chapter 5 Align-ment	Chapter 6 Circuit Diagrams
TELEPHONE SET TA-594/MRC-85(V)2 Service Channel and Monitor Speaker Panel	16, 23, 33, f1, t1	9, f1	7, 11, 34, 35, 36, 56, 89	f3, t2	22	f5
TELEPHONE SET CONTROL C-6370/ MRC-85(V)2 Control Unit	5, 16, 23, 24, 33, f1, t1		5, 28	13, f1, t2		f1, f2, f3
VF Line Amplifier AUDIO FREQUENCY AMPLIFIER AM-4168/MRC-85(V)2	16		7, 9, 30, 33 34, 40, 44, 49, 87	f1, f2, t2	20	f4

ALPHABETICAL INDEX

ALPHABETICAL INDEX (cont)

ALPHABETICAL INDEX (cont)

ALPHABETICAL INDEX (cont)

ALPHABETICAL INDEX (cont)

ALPHABETICAL INDEX (cont)

HEADQUARTERS
DEPARTMENT OF THE ARMY
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Ft Huachuca (1)
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TOAD (5)
LOAD (3)

NG: None.

USAR: None.

For explanation of abbreviations used, see AR 320–50.

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